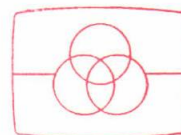
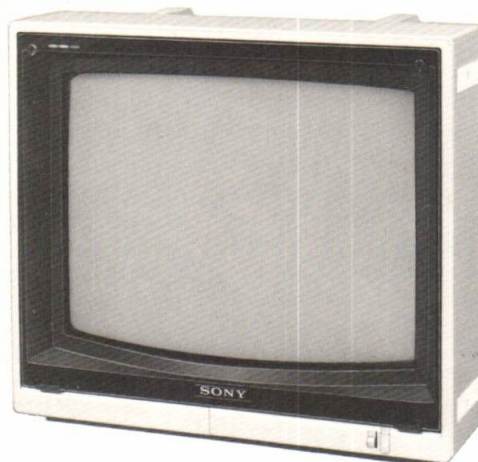


KX-20PS1

SERVICE MANUAL

AEP Model
UK Model

Chassis No. SCC-405A-A

Free service manuals
Gratis schema's

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February, 1982

HF CHASSIS

Also refer to "ADJUSTMENT MANUAL".

SPECIFICATIONS

Television system	CCIR system B, G, H and M
Colour system	PAL, SECAM, NTSC, NTSC4.43
Picture tube	52 cm, 100-degree deflection Trinitron tube (49 cm picture measured diagonally)
Inputs	VIDEO INPUT (BNC connector): 1 V p-p, 75 ohms, unbalanced, sync negative AUDIO INPUT (2 phono jacks): -5 dBs (436 mVrms), 50 kilohms CONTROL (minijack) MULTI INPUT (8-pin): Same as the above VIDEO, AUDIO INPUTS and CONTROL jack PERI-TV (21 pin) RGB MULTI INPUT (34-pin)
Output	SPEAKER: Accepts 8—16 ohm speakers 6W x 2 (8 ohms, with 10% harmonic distortion)
Power requirements	200—240 V ac, 50/60 Hz
Power consumption	150 W 10 W (in standby mode) Approx. 504 x 450 x 475 mm (w/h/d) (19 7/8 x 17 3/4 x 18 3/4 inches)
Dimensions	Approx. 28.7 kg
Weight	(63 lb 5 oz)
Accessories supplied	75-ohm coaxial cable with BNC connectors (1.5m)

Connecting Cord RK-105A (miniplug to 2 phono
plugs, 1.5 m)
Mains lead

While the information given is true at the time of printing, small production changes in the course of our company's policy of improvement through research and design might not necessarily be indicated in the specifications. We would ask you to check with your appointed Sony dealer if clarification on any point is required.

Optional units/accessories

Colour TV Tuner VTX-100E*
Tuner Timer Unit TT-3000E, TT-F1E
Speaker System SS-X1A
Betamax Videocassette Recorder SL-C7E
SL-F1E
Video Cable VK-2D (8-pin plug to 8-pin
plug, 2m)
Video Cable VK-5DX (8-pin socket to 8-pin
plug, 5m)
Plug Adaptor PC-5A (phono plug to minijack)
Video Rack SU-160

* The last letter of the model number indicates where the unit was purchased: E (for European countries), ES (for Germany), UB (for United Kingdom), for example.



TRINITRON®
COLOUR MONITOR
SONY®


72 A 26

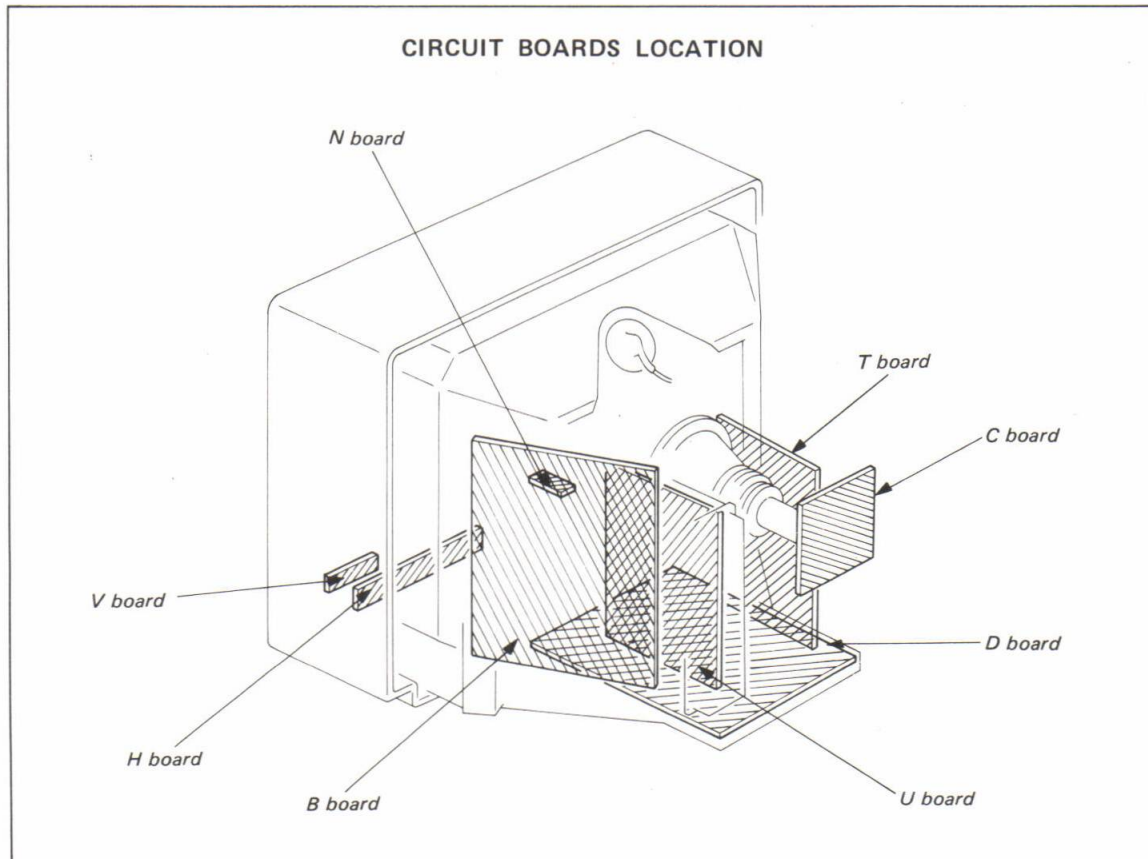
MON

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD BECAUSE OF LIVE CHASSIS. THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

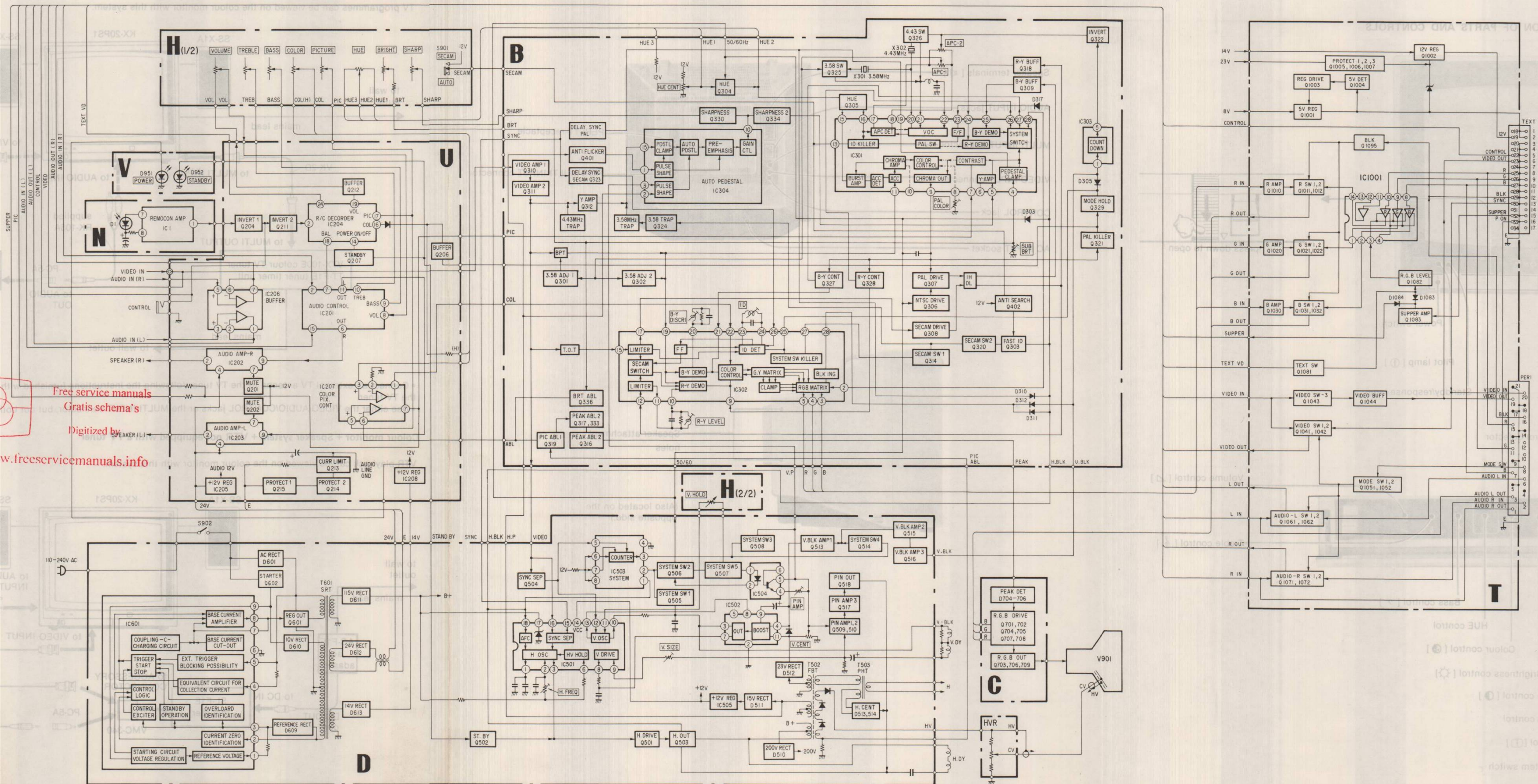
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.



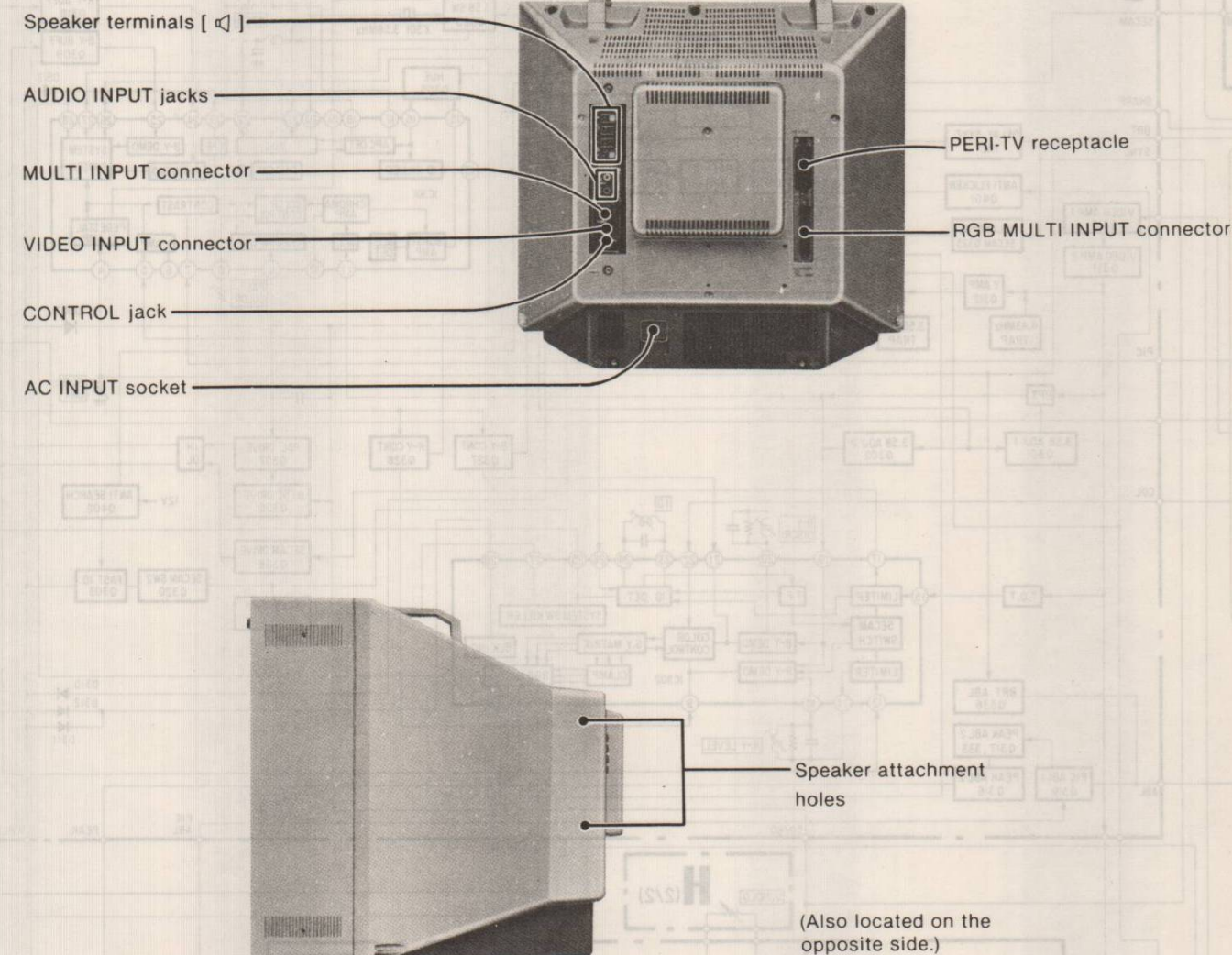
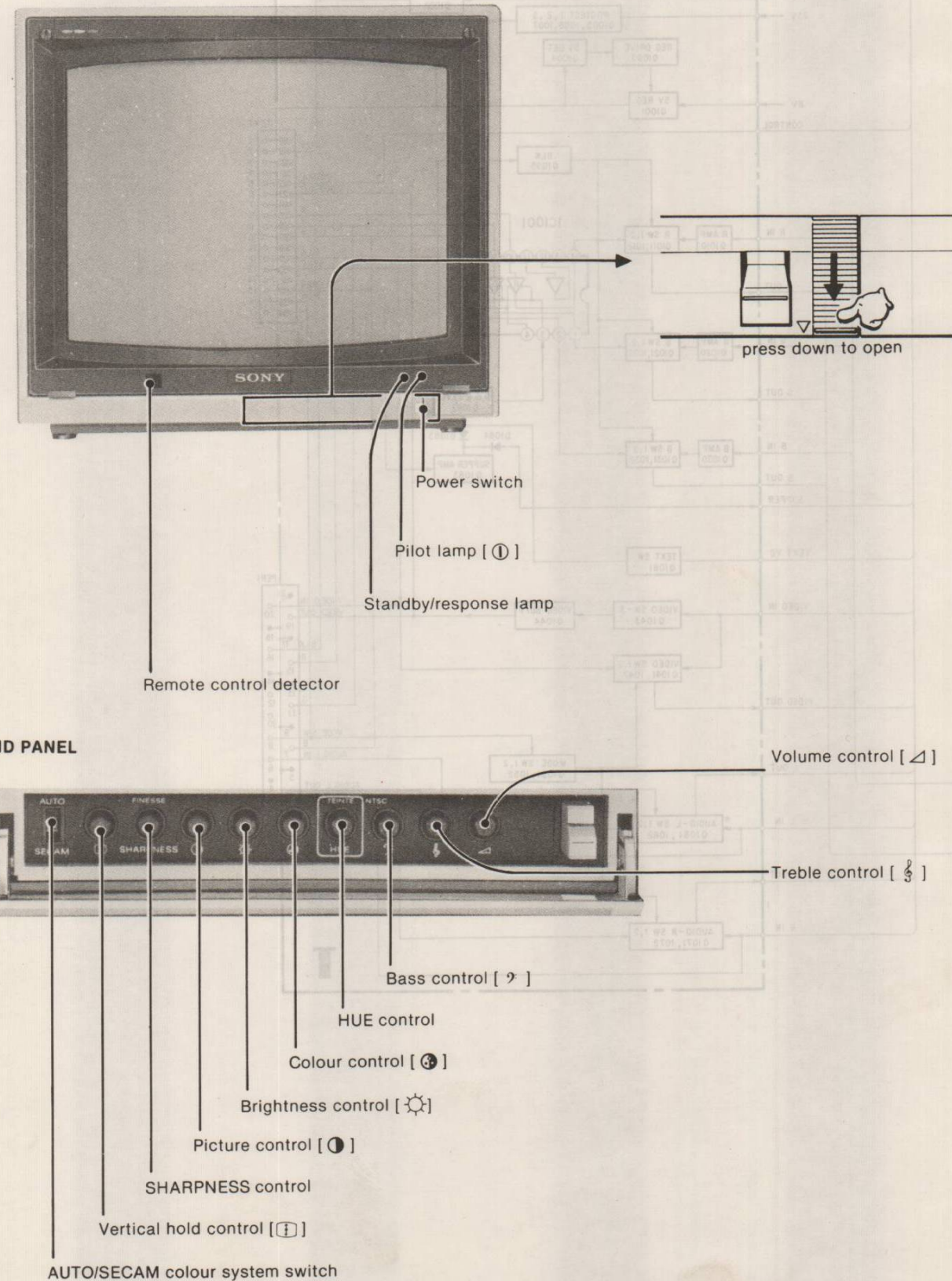
SECTION 1 OUTLINE

1-1. BLOCK DIAGRAM



SECTION 2 GENERAL

2-1. LOCATION AND FUNCTION OF PARTS AND CONTROLS

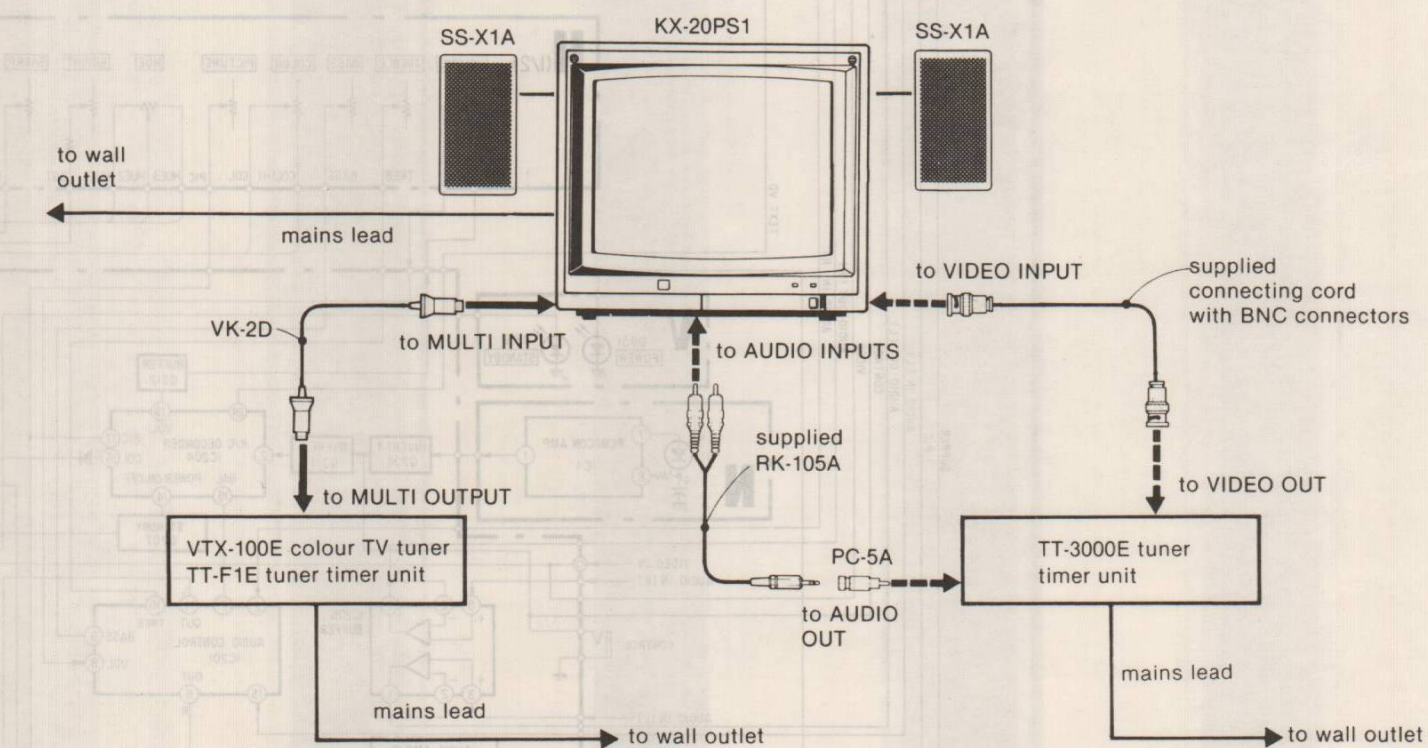


2-2. EXAMPLES OF SYSTEM CONNECTIONS

Prior to connections switch off power of each equipment.

Colour monitor + Speaker system + Colour TV tuner or Tuner timer unit

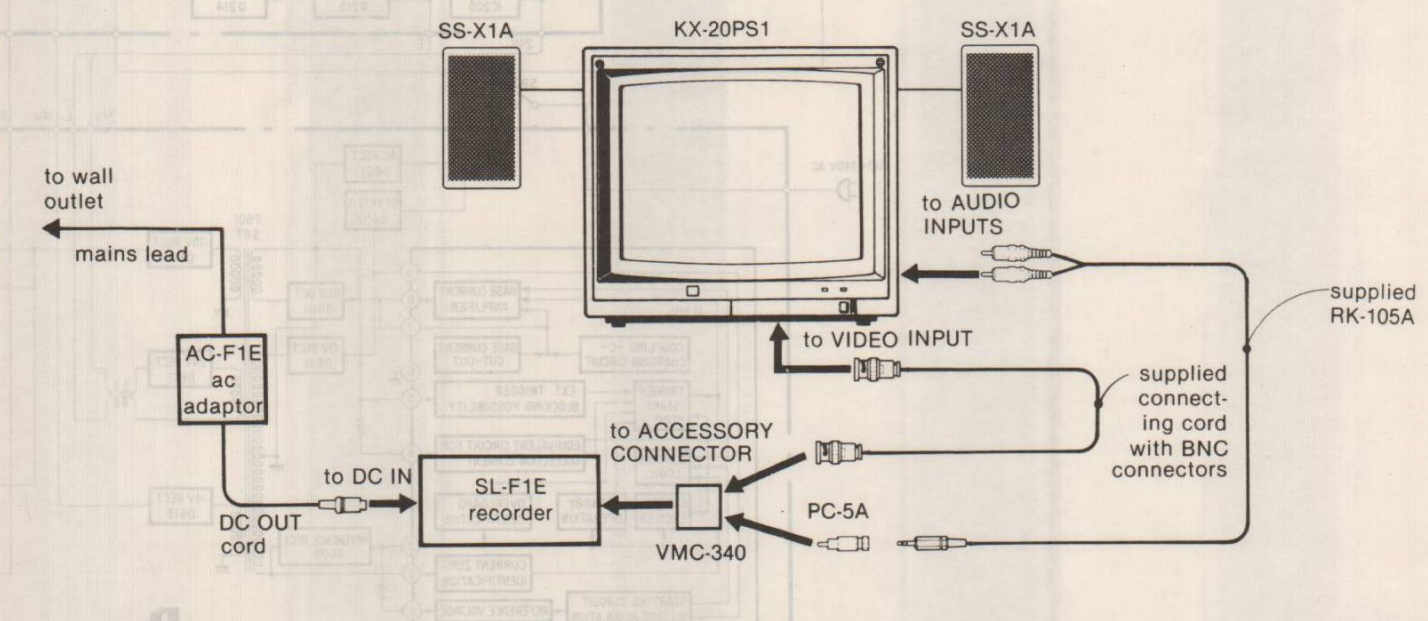
TV programmes can be viewed on the colour monitor with this system.



- Connect an external TV antenna to the TV tuner following the instructions furnished with the TV tuner.
- Use either the VIDEO/AUDIO/CONTROL jacks or the MULTI INPUT connector, but not both simultaneously.

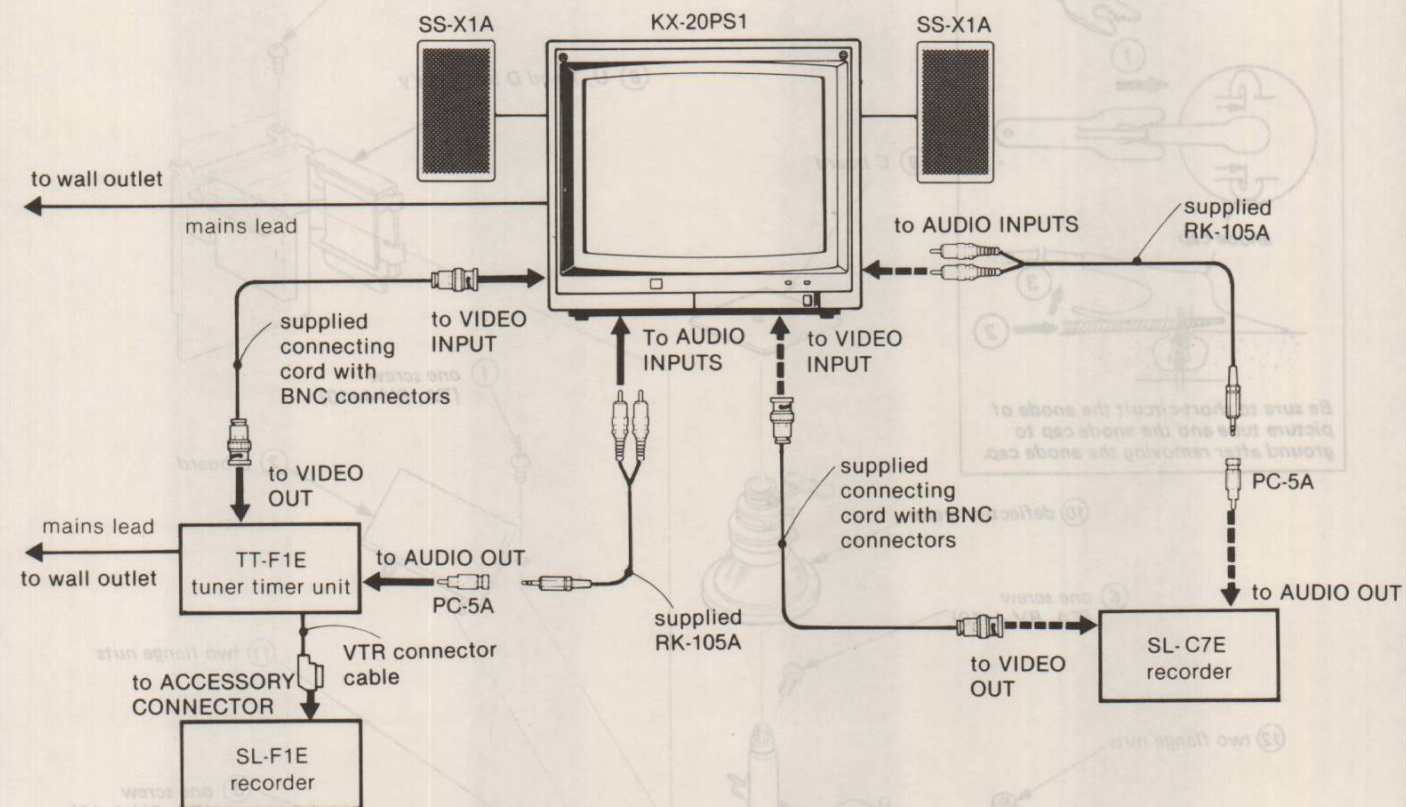
Colour monitor + Speaker system + VTR not equipped with a TV tuner

VTR playback can be viewed on the colour monitor with this system.



Colour monitor + Speaker system + VTR equipped with a TV tuner (or VTR + TV tuner)

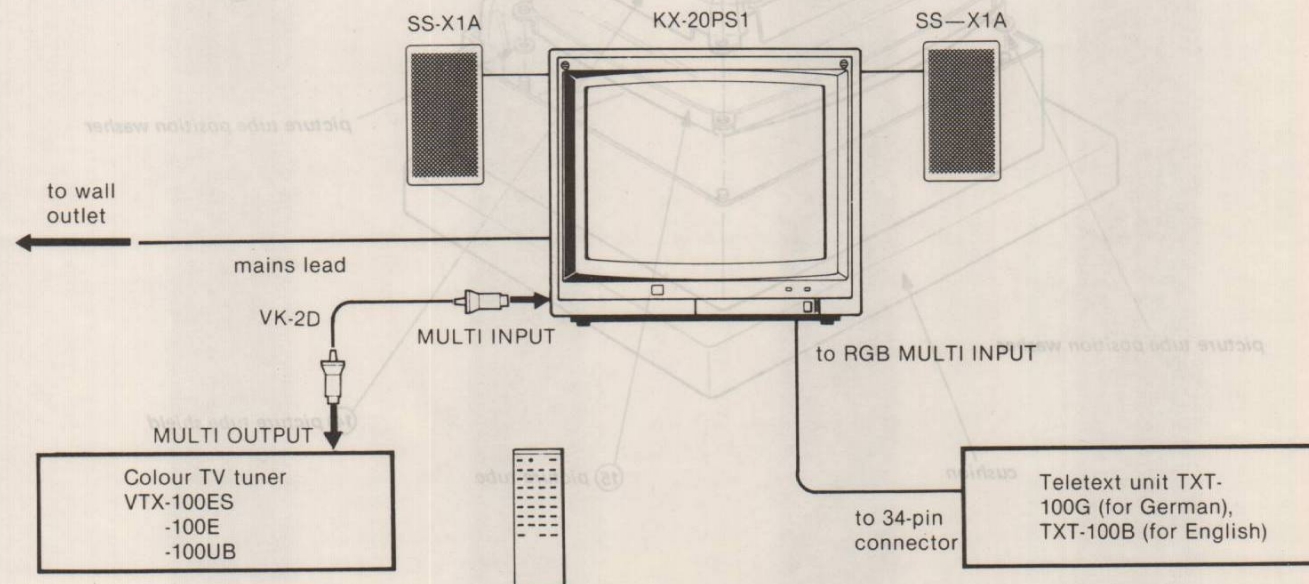
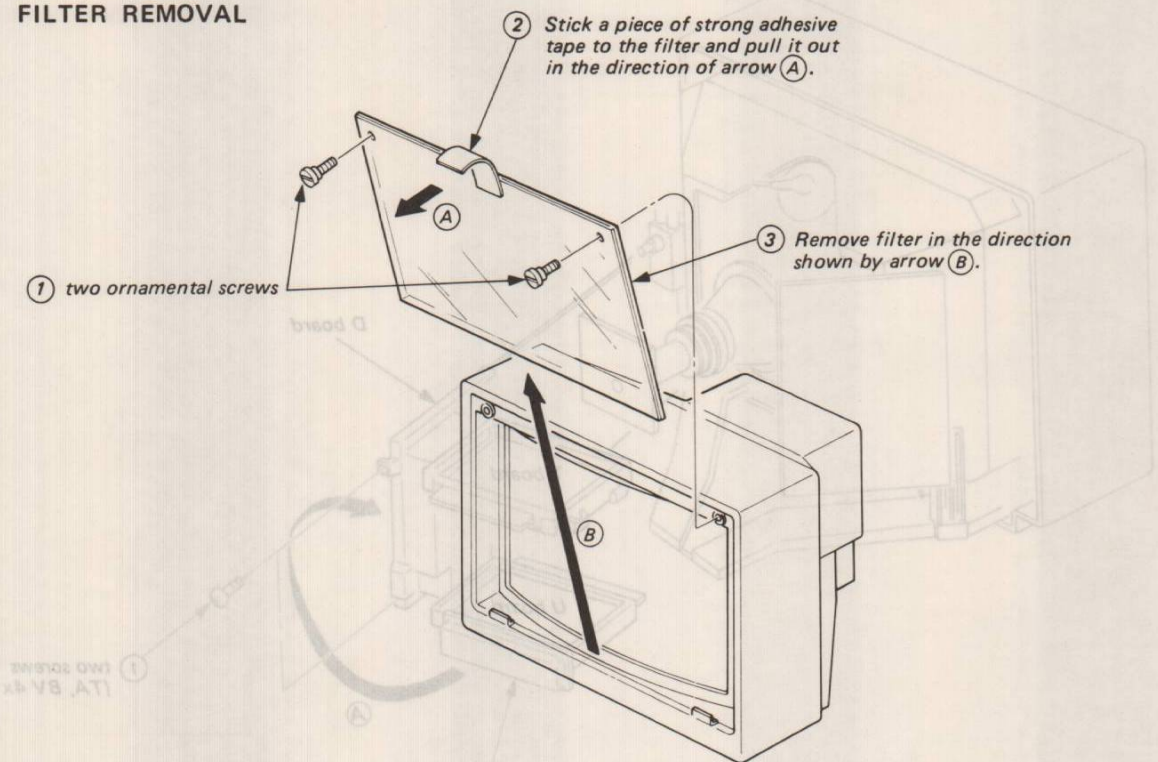
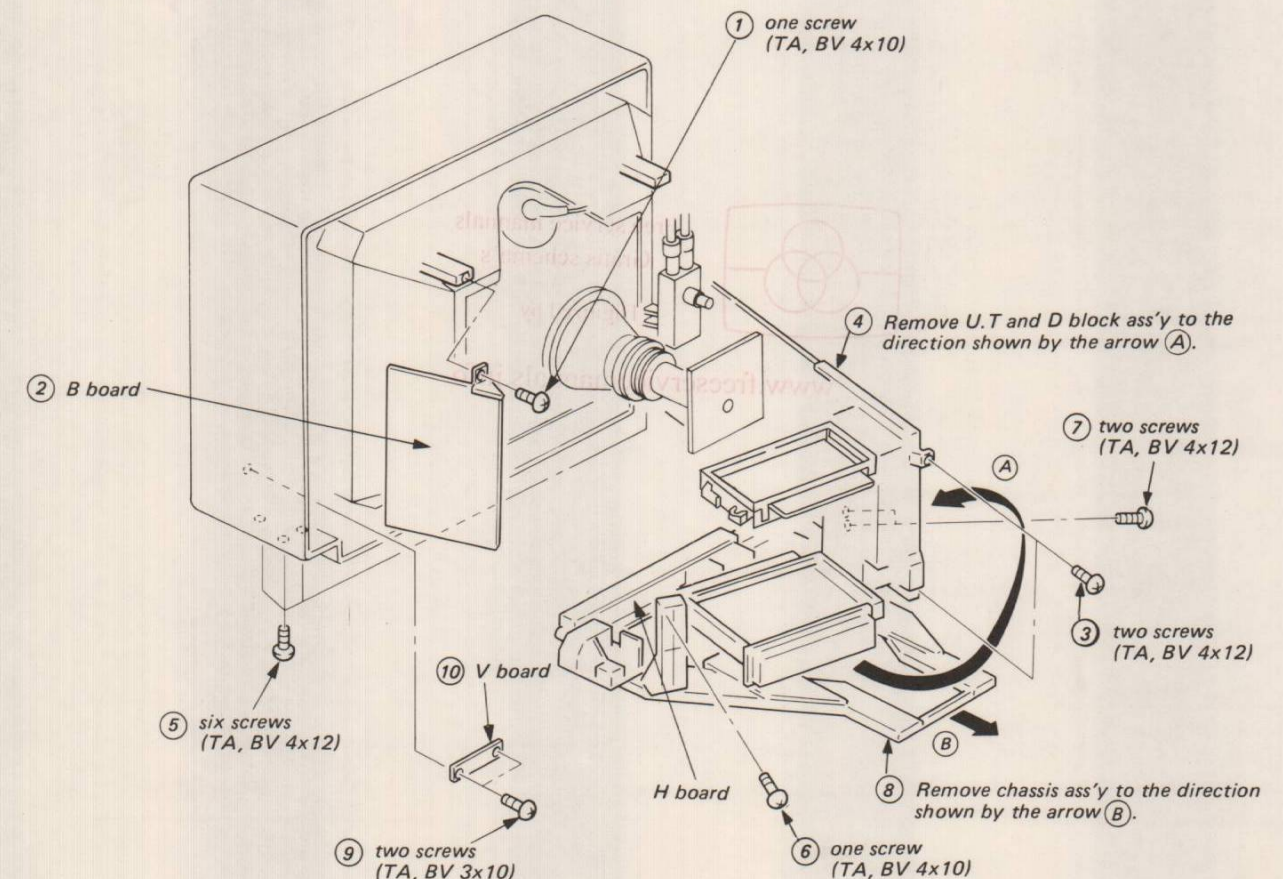
Off-the air TV programmes, recorded TV programmes and camera-recorded programmes can be viewed on the colour monitor with this system.



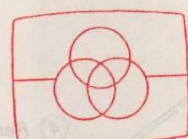
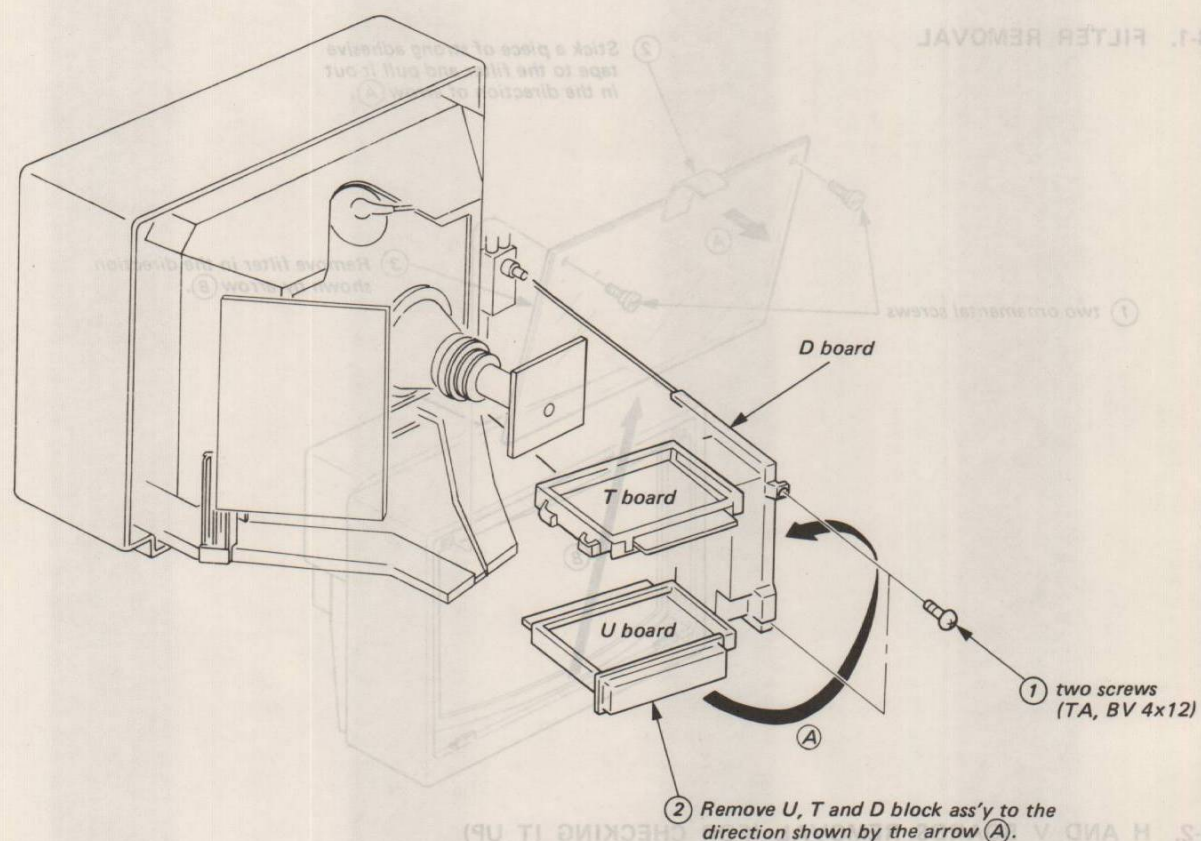
Connect an external TV antenna to the TT-F1E, or SL-C7E following the instructions furnished with this unit.

Colour monitor + Speaker system + Colour TV tuner + Teletext unit

Teletext or videotext programmes can be viewed on the colour monitor. Select the programmes with the Remote Commander designated in the instructions supplied with the VTX-100E colour TV tuner.

**SECTION 3
DISASSEMBLY****3-1. FILTER REMOVAL****3-2. H AND V BOARDS REMOVAL (FOR CHECKING IT UP)**

3-3. U, T AND D BOARDS REMOVAL (FOR CHECKING IT UP)

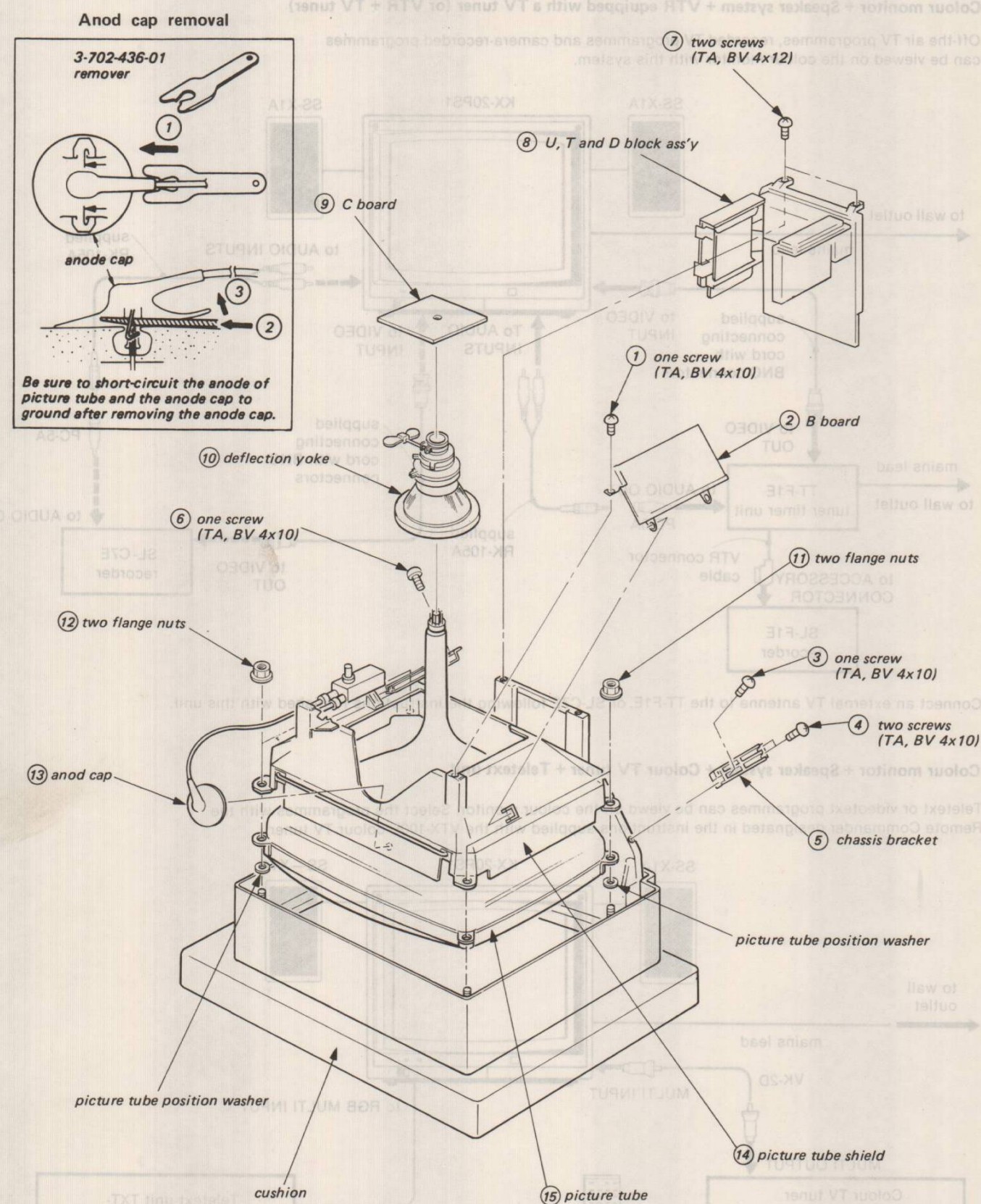


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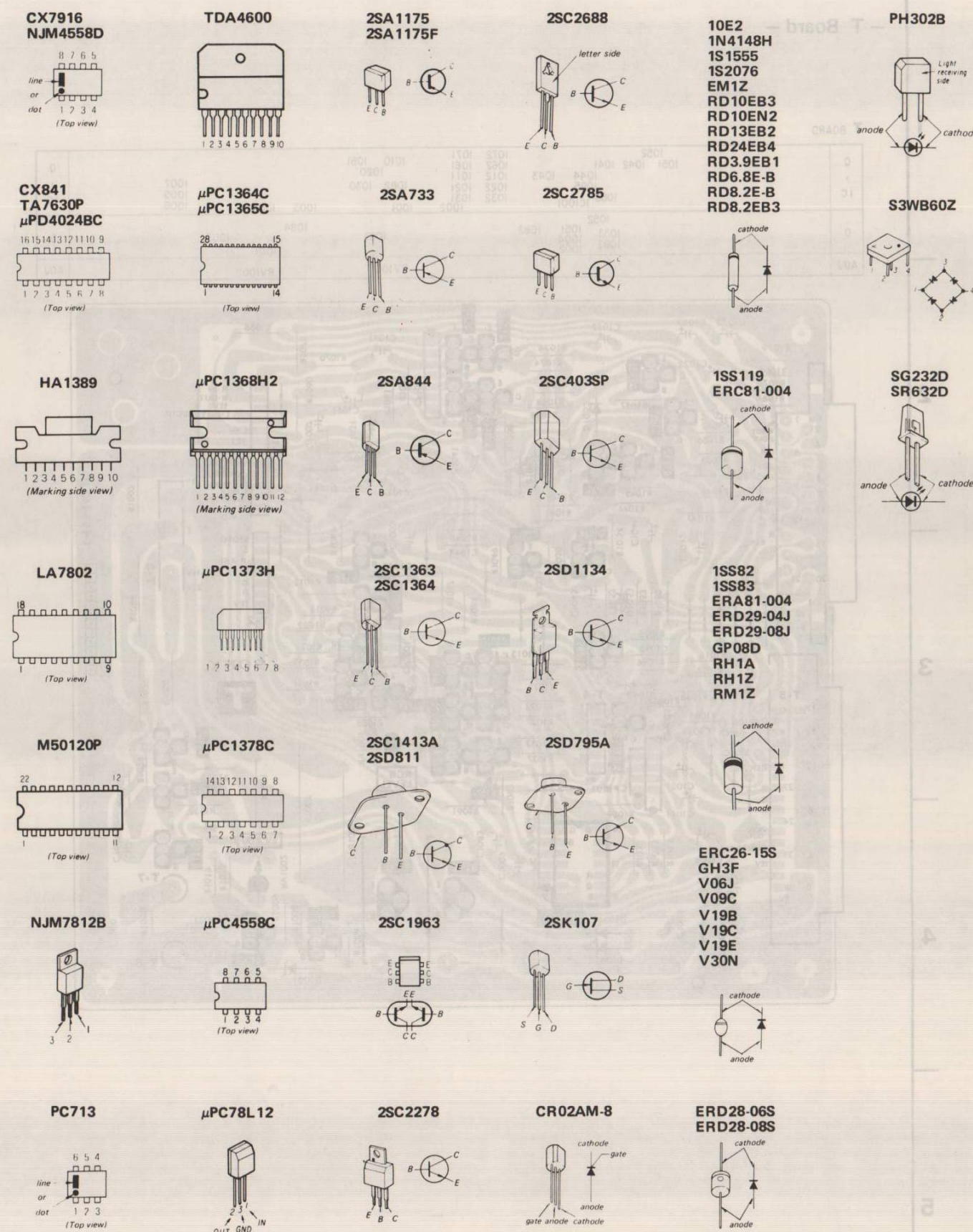
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3-4. PICTURE TUBE REMOVAL



3-5. SEMICONDUCTORS

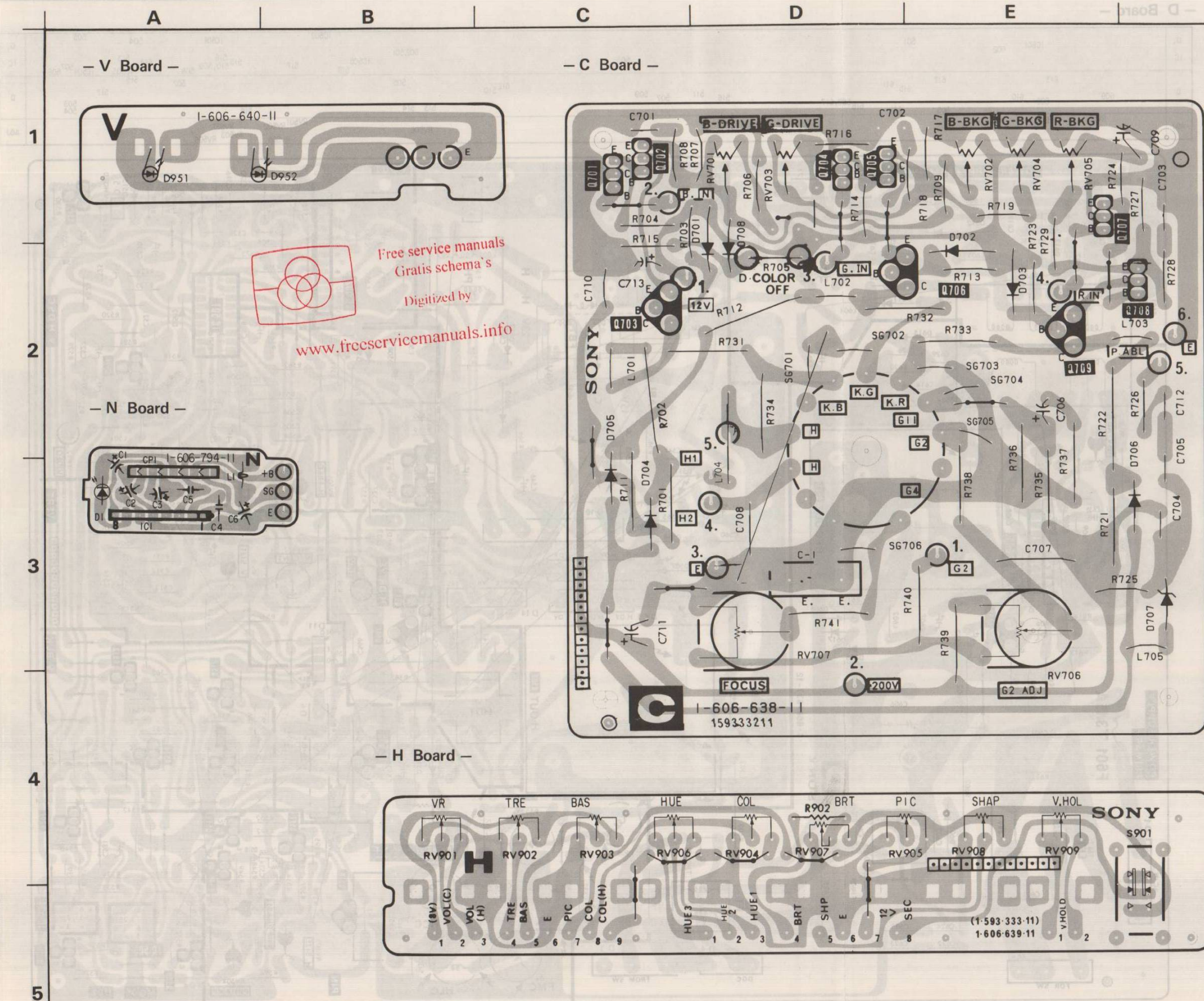


V [INDICATOR] **N** [REMOTE CONTROL]

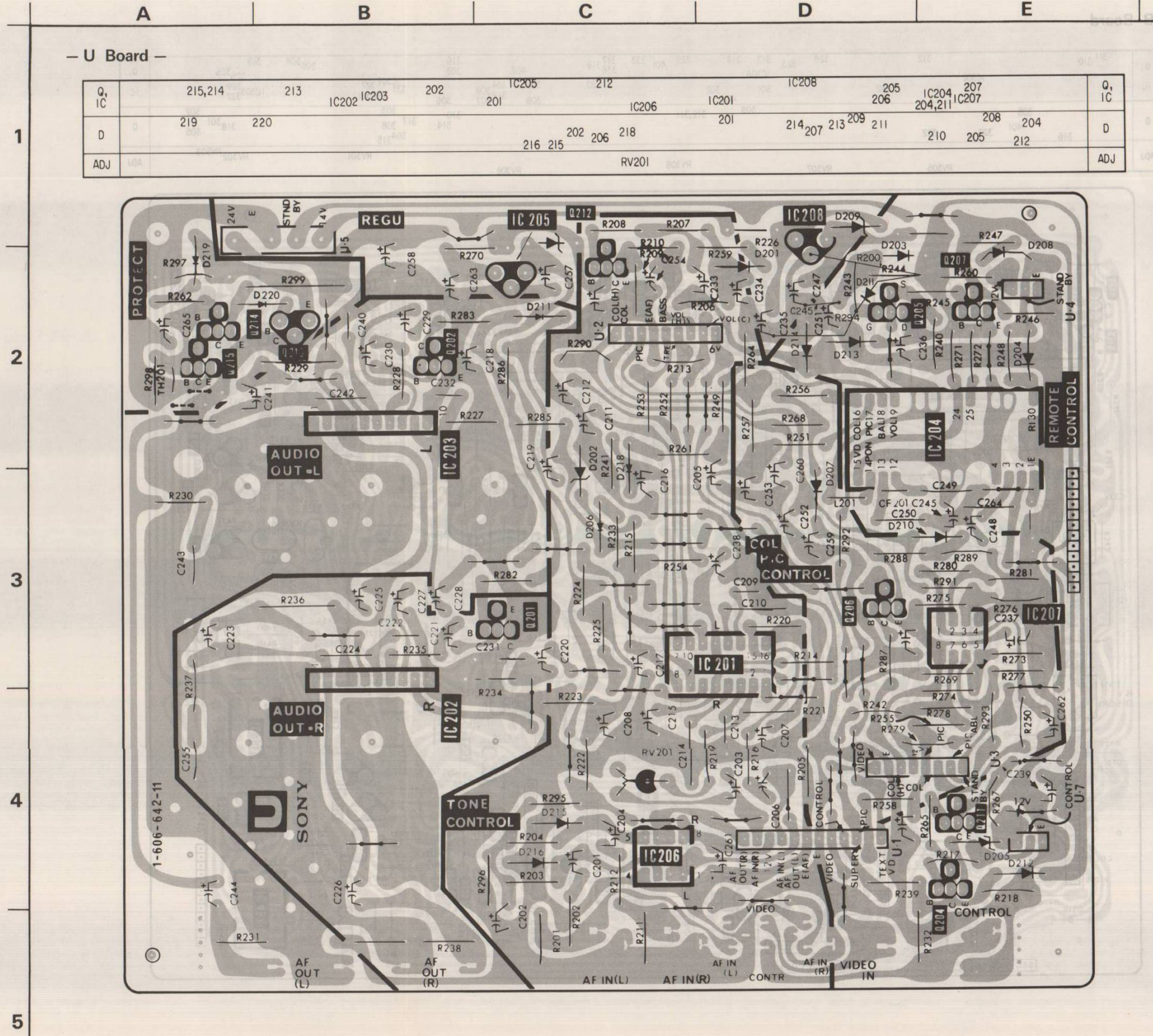
SECTION 4
DIAGRAMS

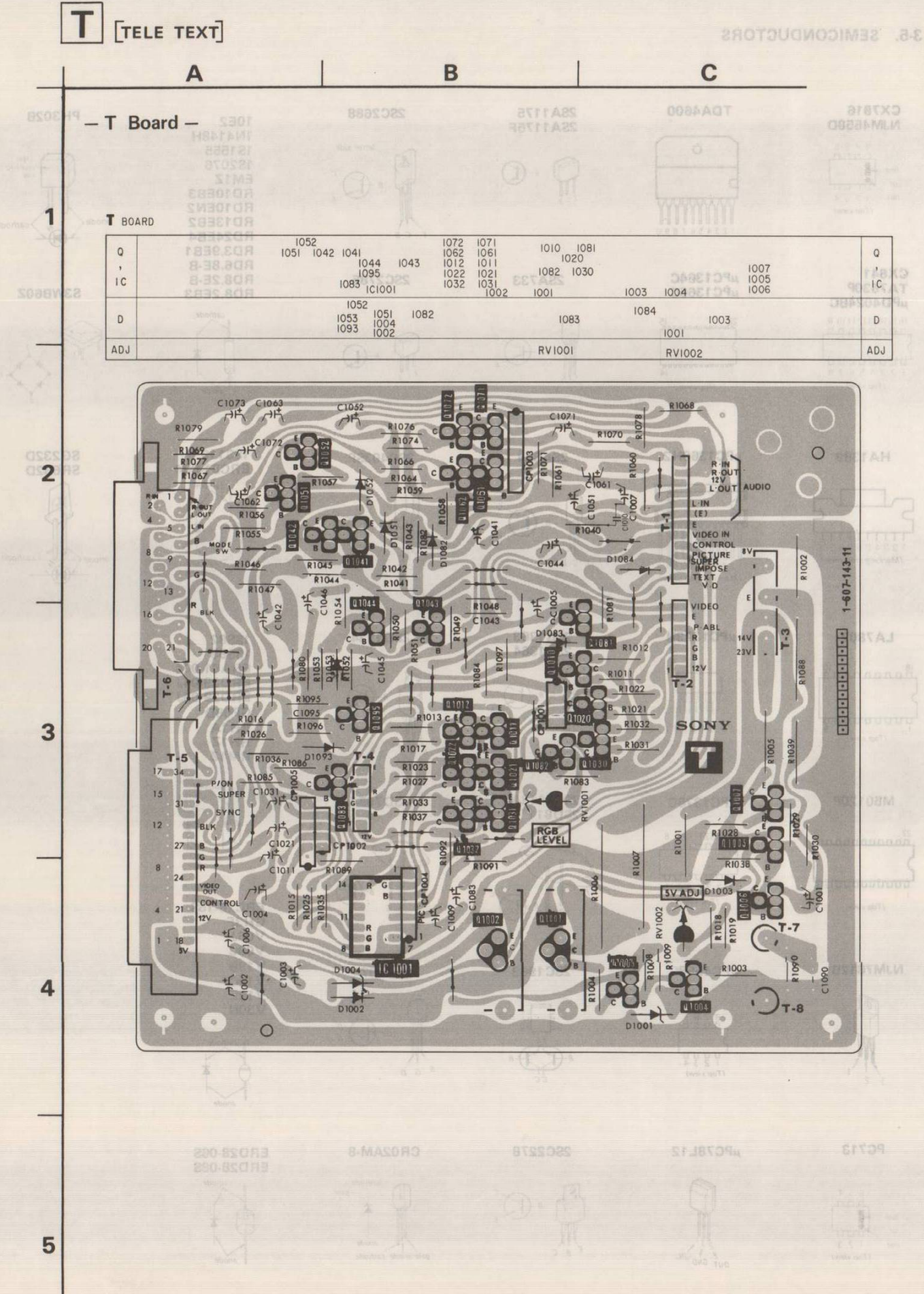
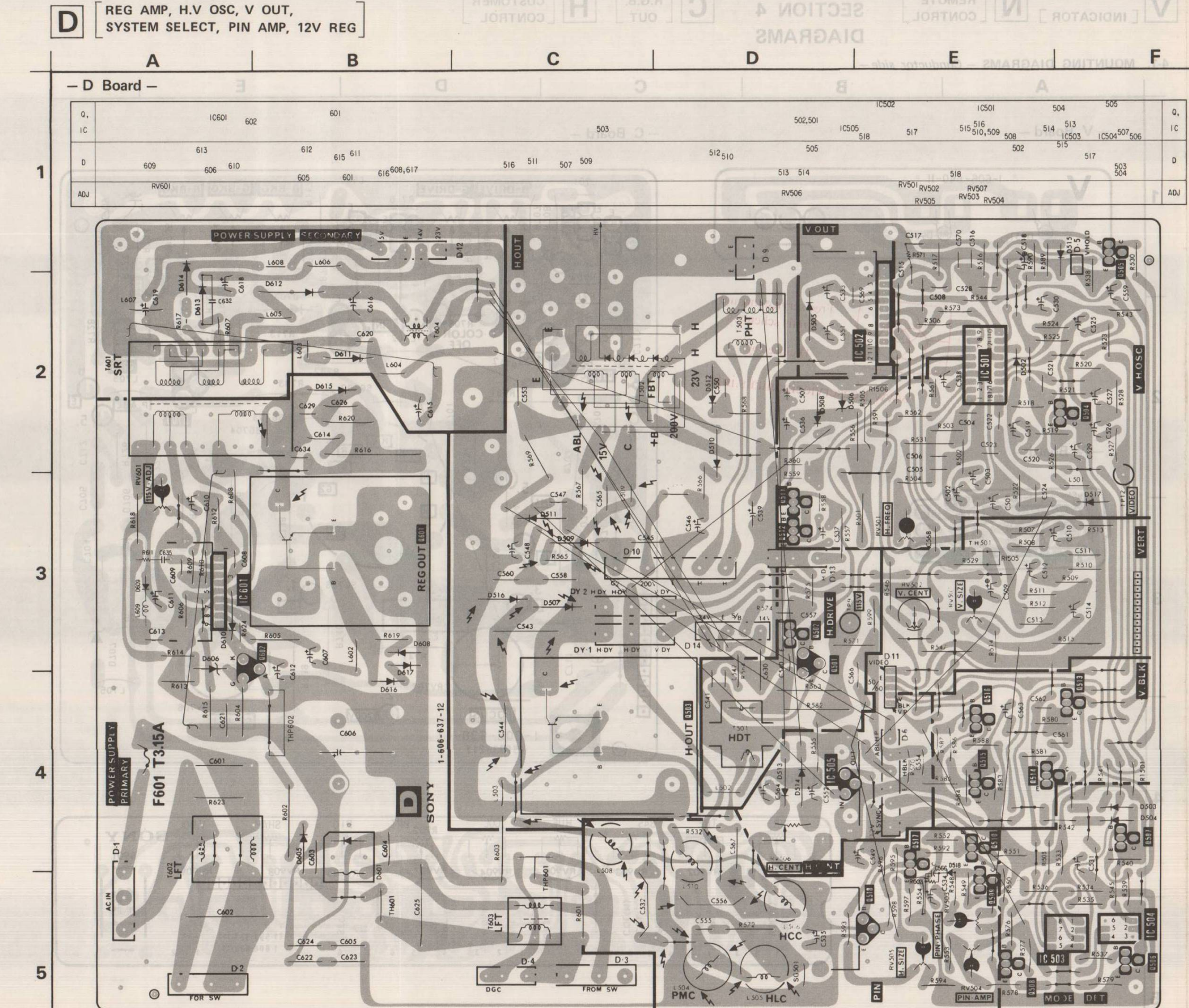
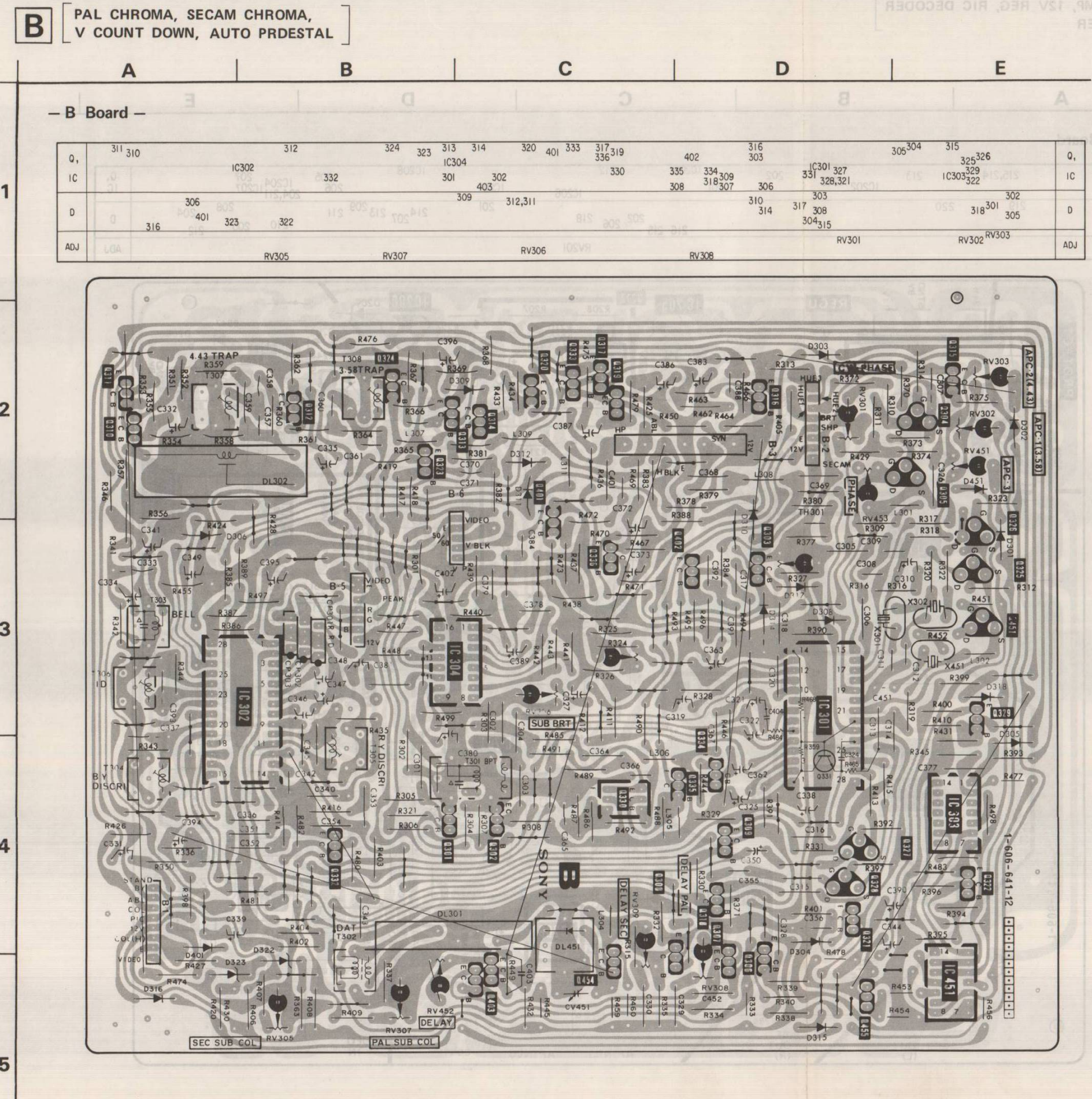
C [R.G.B. OUT] **H** [CUSTOMER CONTROL]

4-1. MOUNTING DIAGRAMS — Conductor side —



U [TONE/VOL/COL/PIC CONTROL]
[AF AMP, 12V REG, RIC DECODER BUFFER]














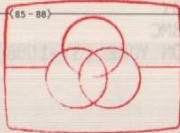
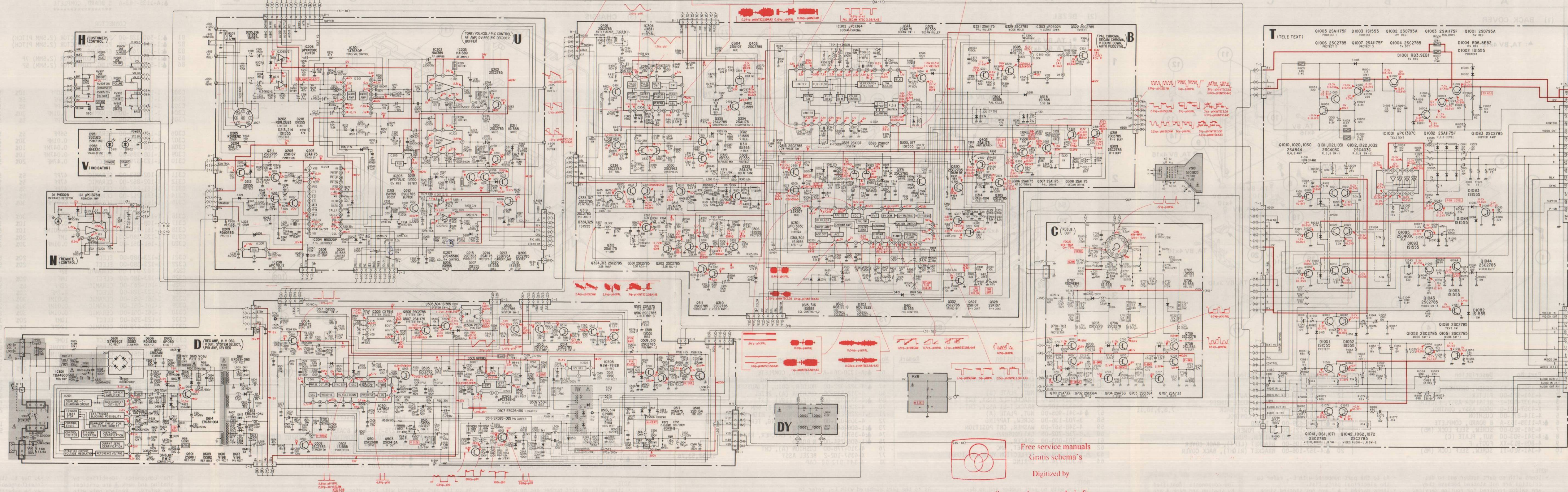
4.3. SCHEMATIC DIAGRAM

Note: The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

Note:

- All capacitors are in μF unless otherwise noted, pF : μF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, $\frac{1}{2}\text{W}$ unless otherwise noted. $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : nonflammable resistor.
-  : fusible resistor.
-  : internal component.
-  : panel designation.

- All voltages are in V.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 M Ω digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- Readings are taken with a color-bar signal input.
-  : adjustment for repair.
- No make: with PAL color-bar signal received.
- () : with SECAM color-bar signal received.
- < > : with NTSC (3.58) color-bar signal received.
- < > : with NTSC (4.43) color-bar signal received.
- () : with TELE TEXT signal received.
-  : B + bus
-  : B - bus



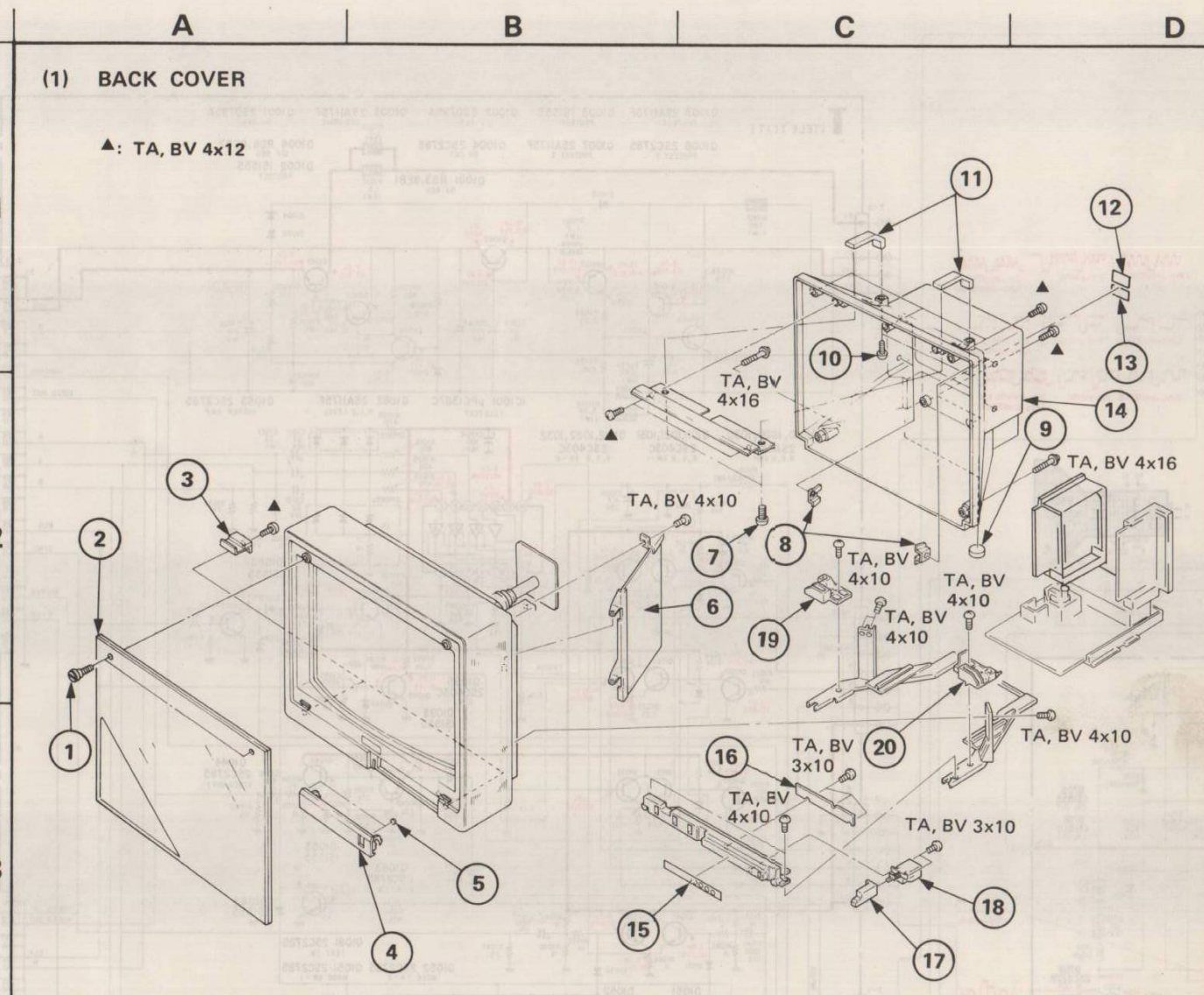
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SECTION 5

EXPLODED VIEWS



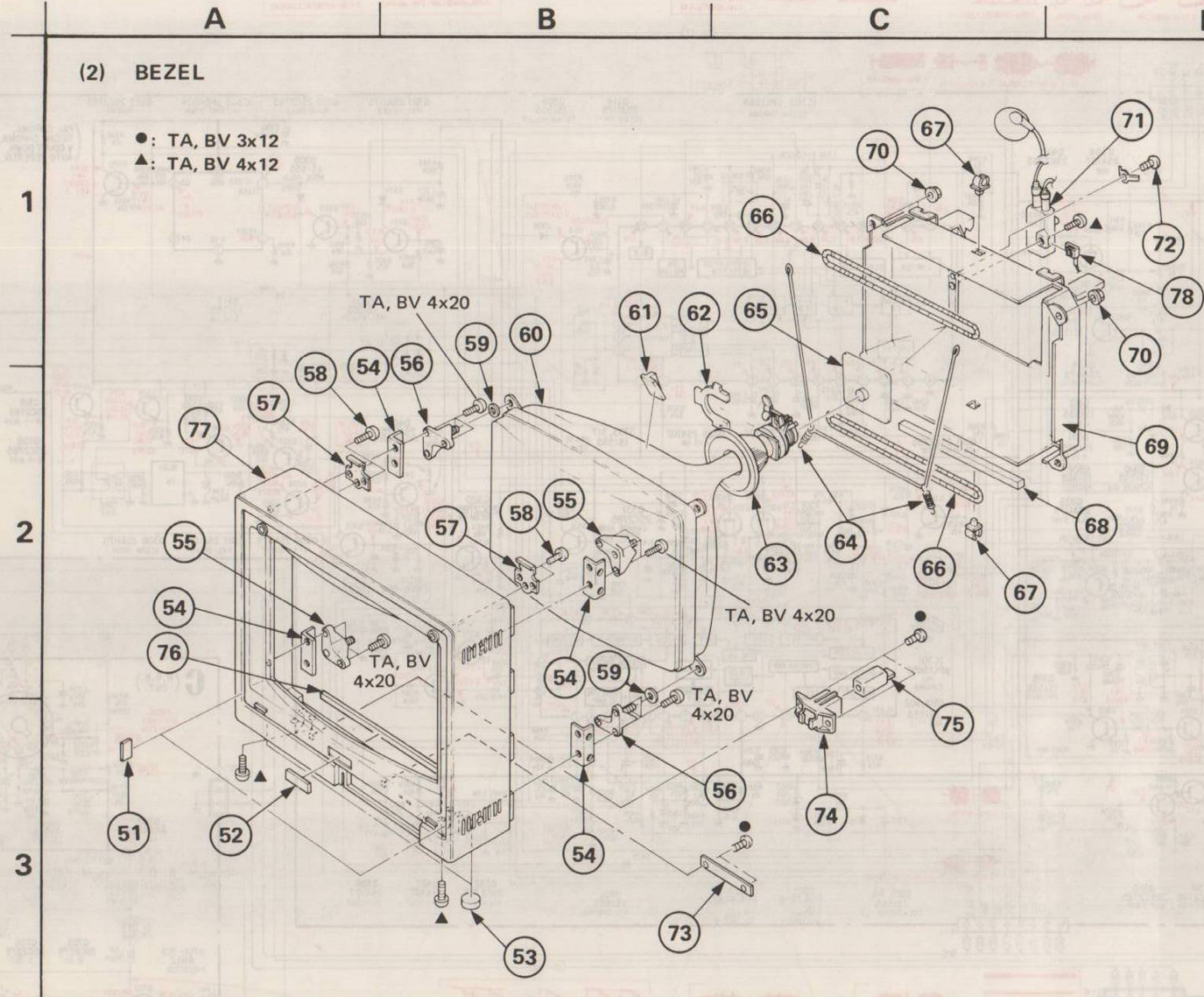
No.	Part No	Description	Remark	No.	Part No	Description	Remark
1	4-336-851-11	SCREW, ORNAMENTAL		11	4-341-913-00	HANDLE	
2	4-341-923-00	FILTER		12	3-703-228-00	LABEL, CAUTION	
3	X-4337-301-2	RETAINER ASSY, FILTER		13	⚡4-357-114-00	LABEL, MODEL NUMBER	
4	X-4357-101-0	DOOR ASSY, CONTROL	5	14	X-4357-103-0	COVER ASSY, BACK	7,8,9,10,
5	4-314-871-00	CUSHION		15	⚡4-357-112-00	LABEL, CONTROL	
6	⚡A-1135-163-A	B BOARD, COMPLETE		16	⚡1-606-639-00	H BOARD	
7	4-341-920-00	SCREW, SELF LOCK (M5)		17	4-357-121-00	KNOB, POWER	
8	⚡4-341-903-00	NUOT, PLATE (C)		18	⚡1-553-225-00	SWITCH, PUSH	
9	4-809-913-XX	FUT, F		19	⚡4-357-105-00	BRACKET (LEFT), BACK COVER	
10	4-341-920-11	SCREW, SELF LOCK (M5)		20	⚡4-357-106-00	BRACKET (RIGHT), BACK COVER	

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- As to the part numbered with E-, refer to the electrical parts list.
- Items marked "♦" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.



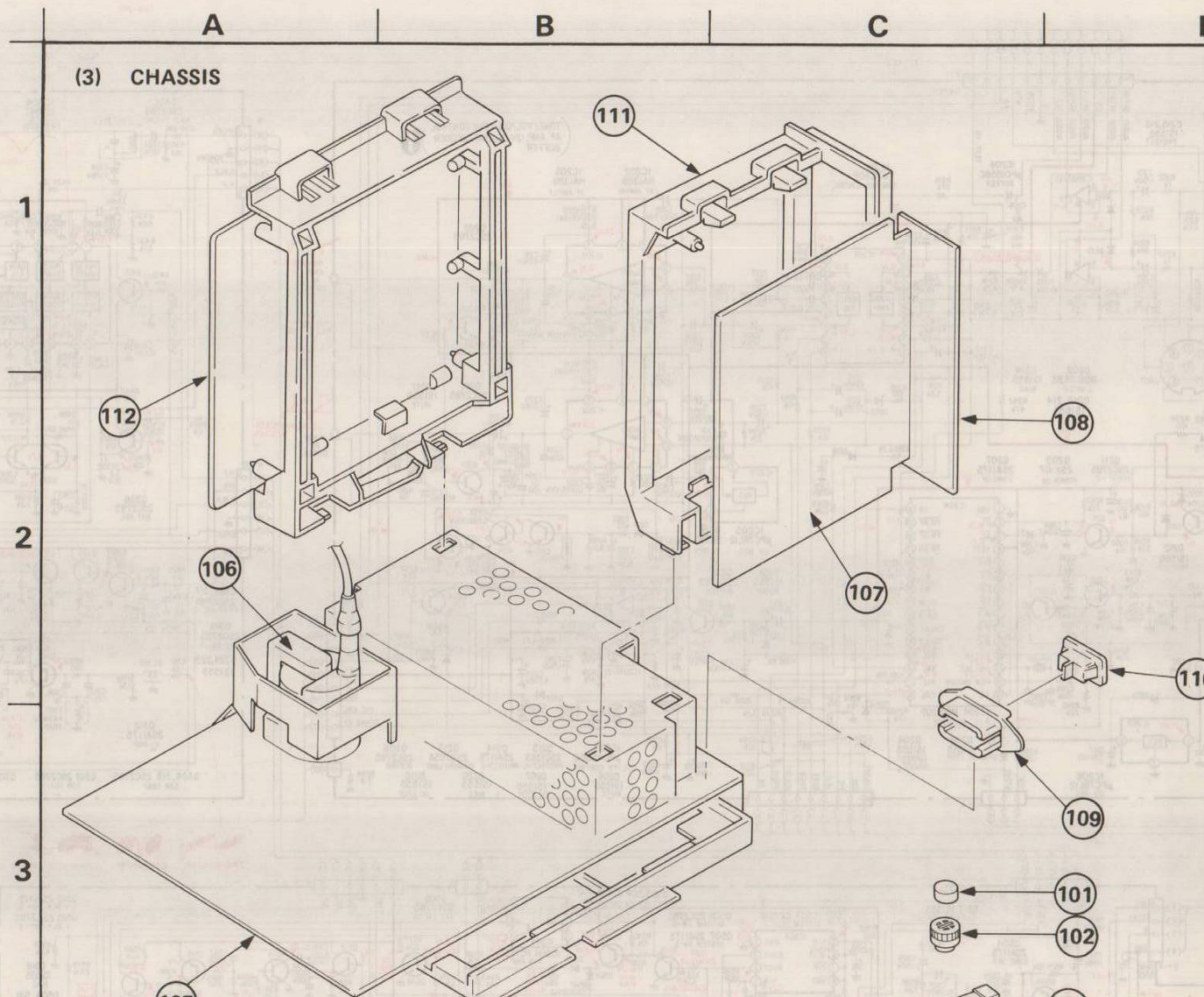
No.	Part No	Description	Remark	No.	Part No	Description	Remark
51	4-341-961-00	SHEET (S)		65	A-1330-364-A	C BOARD, COMPLETE	
52	3-701-912-00	EMBLEM, SONY, (LARGE)		66	A-1426-087-41	COIL, DE GAUSSING	
53	4-809-913-XX	FOOT, F		67	4-322-922-00	HOLDER, COIL, DE GAUSSER	
54	A-4-341-906-00	NUT, PLATE (B)		68	4-312-539-00	CUSHION (A), BEZEL	
55	X-4329-101-0	BRACKET-L2 ASSY, CRT		69	4-337-335-00	SHIELD (19V), CRT	
56	X-4329-102-0	BRACKET-L1 ASSY, CRT		70	4-306-034-00	FLANGE NUT, (B) MM	
57	A-4-341-905-00	NUT, PLATE (A)		71	A-1228-253-31	RESISTOR ASSY, HIGH-VOLTAGE	
58	3-703-136-00	SCREW, TAPPING		72	4-305-021-00	SCREW, TAPPING, TERMINAL, +BV3X8	
59	4-348-567-00	WASHER, CRT POSITION		73	1-606-640-00	V BOARD	
60	A-8-738-702-05	CRT (520S822)		74	4-357-119-00	BRACKET, CATCHER, RAY	
61	3-703-003-00	SPACER, DY		75	1-606-794-00	N BOARD	
62	1-452-146-00	MAGNET, BMC		76	4-310-778-00	CUSHION (A), CRT	
63	A-1-451-204-00	DEFLECTION YOKE (SY-108B)		77	X-4357-102-0	BEZEL ASSY	51,52
64	4-303-774-XX	SPRING		78	A-343, 912, 90		

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

- As to the part numbered with E-, refer to the electrical parts list.
- Items marked "⚡" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and marked with a triangle are critical for safety. Replace only with part number specified.



No.	Part No	Description	Remark	No.	Part No	Description	Remark
101	1-452-032-00	MAQNET, DISK; 10mm Ø		107	▲A-1275-042-A	U BOARD, COMPLETE	
102	1-452-094-00	MAQNET, ROTATABLE DISK; 15mm Ø		108	▲A-1366-700-00	TERMINAL BOARD, INPUT OUTPUT	
103	X-4309-608-00	PERMALLOY ASSY CONVERGENCE		109	▲A-1367-103-00	HEADER, INLET	
104	4-308-870-00	CLIP, LEAD WIRE		110	▲A-1561-867-00	INLET 2P	
105	▲A-1345-370-A	D BOARD, COMPLETE		111	4-357-128-00	PLATE (U), SHIELD	
106	▲A-1339-280-00	TRANSFORMER ASSY. FLYBACK		112	▲A-1327-002-A	T BOARD, COMPLETE	

NOTE:

- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.

As to the part numbered with E-, refer to the electrical parts list.
Items marked "⚡" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

SECTION 6

ELECTRICAL PARTS LIST

1/12	Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
	⚡:A-1135-163-A	B BOARD, COMPLETE						

		CONNECTOR						
B1	⚡:1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)			C346	1-123-380-00	ELECT 1MF	20% 50V
B2	⚡:1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)			C347	1-123-380-00	ELECT 1MF	20% 50V
B3	⚡:1-508-768-00	6P PLUG			C348	1-123-380-00	ELECT 1MF	20% 50V
B5	⚡:1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P			C349	1-123-381-00	ELECT 2.2MF	20% 50V
B6	⚡:1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P			C350	1-121-257-00	ELECT 4.7MF	16V
		CAPACITOR						
C301	1-161-313-00	CERAMIC 150PF	10%	50V	C351	1-161-313-00	CERAMIC 150PF	10% 50V
C302	1-161-269-00	CERAMIC 68PF	5%	50V	C352	1-161-270-00	CERAMIC 82PF	5% 50V
C303	1-161-268-00	CERAMIC 56PF	5%	50V	C353	1-161-270-00	CERAMIC 82PF	5% 50V
C304	1-161-051-00	CERAMIC 0.01MF	30%	25V	C354	1-161-313-00	CERAMIC 150PF	10% 50V
C305	1-161-267-00	CERAMIC 47PF	5%	50V	C355	1-121-257-00	ELECT 4.7MF	16V
C306	1-161-268-00	CERAMIC 56PF	5%	50V	C356	1-161-051-00	CERAMIC 0.01MF	30% 25V
C307	1-161-051-00	CERAMIC 0.01MF	30%	25V	C357	1-102-809-00	CERAMIC 7PF	1PF 50V
C308	1-108-385-00	MYLAR 0.047MF	10%	100V	C358	1-102-809-00	CERAMIC 7PF	1PF 50V
C309	1-108-385-00	MYLAR 0.047MF	10%	100V	C360	1-102-809-00	CERAMIC 7PF	1PF 50V
C310	1-123-379-00	ELECT 0.47MF	20%	50V	C361	1-102-809-00	CERAMIC 7PF	1PF 50V
C311	1-102-852-00	CERAMIC 47PF	5%	50V	C362	1-123-356-00	ELECT 10MF	20% 16V
C312	1-102-852-00	CERAMIC 47PF	5%	50V	C363	1-123-333-00	ELECT 100MF	20% 16V
C313	1-161-267-00	CERAMIC 47PF	5%	50V	C364	1-161-270-00	CERAMIC 82PF	5% 50V
C314	1-161-262-00	CERAMIC 18PF	5%	50V	C365	1-101-006-00	CERAMIC 0.047MF	50V
C315	1-161-051-00	CERAMIC 0.01MF	30%	25V	C366	1-101-006-00	CERAMIC 0.047MF	50V
C316	1-161-051-00	CERAMIC 0.01MF	30%	25V	C367	1-161-264-00	CERAMIC 27PF	5% 50V
C317	1-108-389-00	MYLAR 0.1MF	10%	100V	C368	1-161-319-00	CERAMIC 470PF	10% 50V
C318	1-161-323-00	CERAMIC 0.001MF	10%	50V	C369	1-161-319-00	CERAMIC 470PF	10% 50V
C319	1-123-380-00	ELECT 1MF	20%	50V	C370	1-161-271-00	CERAMIC 100PF	5% 50V
C320	1-161-051-00	CERAMIC 0.01MF	30%	25V	C371	1-108-377-00	MYLAR 0.01MF	10% 100V
C321	1-123-380-00	ELECT 1MF	20%	50V	C372	1-123-379-00	ELECT 0.47MF	20% 50V
C322	1-123-380-00	ELECT 1MF	20%	50V	C373	1-123-382-00	ELECT 3.3MF	20% 50V
C324	1-102-971-00	CERAMIC 82P			C377	1-161-320-00	CERAMIC 560PF	10% 50V
C325	1-123-380-00	ELECT 1MF	20%	50V	C378	1-108-389-00	MYLAR 0.1MF	10% 100V
C326	1-161-263-00	CERAMIC 22PF	5%	50V	C379	1-108-389-00	MYLAR 0.1MF	10% 100V
C327	1-123-328-00	ELECT 4.7MF	20%	25V	C380	1-123-380-00	ELECT 1MF	20% 50V
C328	1-161-051-00	CERAMIC 0.01MF	30%	25V	C381	1-123-318-00	ELECT 33MF	20% 16V
C329	1-161-051-00	CERAMIC 0.01MF	30%	25V	C383	1-123-380-00	ELECT 1MF	20% 50V
C330	1-161-051-00	CERAMIC 0.01MF	30%	25V	C384	1-108-422-00	MYLAR 0.012MF	10% 200V
C332	1-123-356-00	ELECT 10MF	20%	16V	C386	1-123-356-00	ELECT 10MF	20% 16V
C333	1-102-679-00	CERAMIC 120PF	5%	50V	C387	1-123-356-00	ELECT 10MF	20% 16V
C334	1-123-356-00	ELECT 10MF	20%	16V	C388	1-101-810-00	CERAMIC 100PF	5% 500V
C335	1-123-299-00	ELECT 1000MF	20%	6.3V	C389	1-123-356-00	ELECT 10MF	20% 16V
C336	1-161-051-00	CERAMIC 0.01MF	30%	25V	C390	1-123-332-00	ELECT 47MF	20% 16V
C337	1-102-892-00	CERAMIC 22PF	5%	50V	C391	1-161-323-00	CERAMIC 0.001MF	10% 50V
C338	1-123-333-00	ELECT 100MF	20%	16V	C392	1-108-389-00	MYLAR 0.1MF	10% 100V
C339	1-123-380-00	ELECT 1MF	20%	50V	C393	1-101-888-00	CERAMIC 68PF	5% 50V
C340	1-108-849-00	MYLAR 0.1MF	10%	50V	C395	1-123-332-00	ELECT 47MF	20% 16V
C341	1-123-379-00	ELECT 0.47MF	20%	50V	C401	1-108-385-00	MYLAR 0.047MF	10% 100V
C342	1-101-004-00	CERAMIC 0.01MF	30%	50V	C402	1-123-332-00	ELECT 47PF	20% 16V
C343	1-161-051-00	CERAMIC 0.01MF	30%	25V	C403	1-161-267-00	CERAMIC 47PF	5% 50V
C344	1-123-356-00	ELECT 10MF	20%	16V	C404	1-161-265-00	CERAMIC 33PF	
C345	1-102-892-00	CERAMIC 22PF	5%	50V				

NOTE:

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

* =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

* Items marked " ⚡ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
MF : μF , PF : $\mu\mu\text{F}$

RESISTORS


- All resistors are in ohms
- F : nonflammable

COILS
• MMH : mH, UH : μ H


2

Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
<u>DIODE</u>							
D301	=>8-719-911-19	DIODE 1SS119		Q307	8-729-117-54	TRANSISTOR 2SA1175	
D302	=>8-719-911-19	DIODE 1SS119		Q308	8-729-117-54	TRANSISTOR 2SA1175	
D303	=>8-719-911-19	DIODE 1SS119		Q309	8-729-178-54	TRANSISTOR 2SC2785	
D304	=>8-719-911-19	DIODE 1SS119		Q310	8-729-178-54	TRANSISTOR 2SC2785	
D305	=>8-719-911-19	DIODE 1SS119		Q311	8-729-178-54	TRANSISTOR 2SC2785	
D306	=>8-719-911-19	DIODE 1SS119		Q312	8-729-117-54	TRANSISTOR 2SA1175	
D308	=>8-719-911-19	DIODE 1SS119		Q313	8-729-178-54	TRANSISTOR 2SC2785	
D309	=>8-719-911-19	DIODE 1SS119		Q314	8-729-117-54	TRANSISTOR 2SA1175	
D310	=>8-719-911-19	DIODE 1SS119		Q315	8-729-178-54	TRANSISTOR 2SC2785	
D311	=>8-719-911-19	DIODE 1SS119		Q316	8-729-117-54	TRANSISTOR 2SA1175	
D312	=>8-719-911-19	DIODE 1SS119		Q317	8-729-178-54	TRANSISTOR 2SC2785	
D314	8-719-981-01	DIODE ERA81-004		Q318	8-729-178-54	TRANSISTOR 2SC2785	
D315	=>8-719-911-19	DIODE 1SS119		Q319	8-729-178-54	TRANSISTOR 2SC2785	
D316	=>8-719-911-19	DIODE 1SS119		Q320	8-729-178-54	TRANSISTOR 2SC2785	
D317	=>8-719-911-19	DIODE 1SS119		Q321	8-729-117-54	TRANSISTOR 2SA1175	
D318	=>8-719-911-19	DIODE 1SS119		Q322	8-729-178-54	TRANSISTOR 2SC2785	
D322	8-719-182-07	DIODE RD8.2E-B		Q323	8-729-117-54	TRANSISTOR 2SA1175	
D323	=>8-719-100-41	DIODE RD6.8EB2		Q324	8-729-178-54	TRANSISTOR 2SC2785	
D324	8-719-815-55	DIODE 1S1555		Q325	8-769-200-30	TRANSISTOR 2SK107-3	
D325	8-719-815-55	DIODE 1S1555		Q326	8-769-200-30	TRANSISTOR 2SK107-3	
D401	=>8-719-911-19	DIODE 1SS119		Q327	8-769-200-30	TRANSISTOR 2SK107-3	
D402	=>8-719-911-19	DIODE 1SS119		Q328	8-769-200-30	TRANSISTOR 2SK107-3	
<u>DELAY LINE</u>				Q329	8-729-178-54	TRANSISTOR 2SC2785	
DL301	1-415-122-31	DELAY LINE		Q330	8-765-220-20	TRANSISTOR 2SC1963	
DL302	1-415-188-00	DELAY LINE		Q331	8-729-178-54	TRANSISTOR 2SC2785	
<u>IC</u>				Q332	8-729-178-54	TRANSISTOR 2SC2785	
IC301	8-759-113-65	IC UPC1365C		Q333	8-729-178-54	TRANSISTOR 2SC2785	
IC302	8-759-100-15	IC UPC1364C		Q334	8-729-117-54	TRANSISTOR 2SA1175	
IC303	=>8-759-240-24	IC TC4024BP		Q335	8-729-178-54	TRANSISTOR 2SC2785	
IC304	8-759-908-41	IC CX841		Q336	8-729-178-54	TRANSISTOR 2SC2785	
<u>COIL</u>				Q401	8-729-178-54	TRANSISTOR 2SC2785	
L301	1-407-700-00	MICRO INDUCTOR 39UH		Q402	8-729-117-54	TRANSISTOR 2SA1175	
L302	1-407-690-00	MICRO INDUCTOR 5.6UH		Q403	8-729-178-54	TRANSISTOR 2SC2785	
L304	1-407-189-XX	MICRO INDUCTOR 8.2UH		<u>RESISTOR</u>			
L305	1-407-708-00	MICRO INDUCTOR 180UH		R301	1-246-477-00	CARBON 1.5K 5% 1/4W	
L306	1-407-698-00	MICRO INDUCTOR 27UH		R302	1-246-477-00	CARBON 1.5K 5% 1/4W	
L307	1-407-163-XX	MICRO INDUCTOR 33UH		R303	1-246-493-00	CARBON 6.8K 5% 1/4W	
L308	1-408-160-00	MICRO INDUCTOR 15MMH		R304	1-246-501-00	CARBON 15K 5% 1/4W	
L309	1-408-160-00	MICRO INDUCTOR 15MMH		R305	1-246-509-00	CARBON 33K 5% 1/4W	
L311	1-408-247-00	MICRO INDUCTOR 33MMH		R306	1-246-521-00	CARBON 100K 5% 1/4W	
<u>TRANSISTOR</u>				R307	1-246-501-00	CARBON 15K 5% 1/4W	
Q301	8-729-178-54	TRANSISTOR 2SC2785		R308	1-246-509-00	CARBON 33K 5% 1/4W	
Q302	8-729-178-54	TRANSISTOR 2SC2785		R309	1-246-465-00	CARBON 470 5% 1/4W	
Q303	8-729-178-54	TRANSISTOR 2SC2785		R310	1-246-481-00	CARBON 2.2K 5% 1/4W	
Q304	8-769-200-30	TRANSISTOR 2SK107-3		R311	1-246-487-00	CARBON 3.9K 5% 1/4W	
Q305	8-769-200-30	TRANSISTOR 2SK107-3		R312	1-246-545-00	CARBON 1M 5% 1/4W	
Q306	8-729-117-54	TRANSISTOR 2SA1175		R313	1-246-517-00	CARBON 68K 5% 1/4W	
				R314	1-246-545-00	CARBON 1M 5% 1/4W	
				R315	1-246-449-00	CARBON 100 5% 1/4W	
				R316	1-246-481-00	CARBON 2.2K 5% 1/4W	
				R317	1-246-507-00	CARBON 27K 5% 1/4W	
				R318	1-246-507-00	CARBON 27K 5% 1/4W	
				R319	1-246-473-00	CARBON 1K 5% 1/4W	

NOTE:

The components identified by shading and mark  are critical for safety. Replace only with part number specified.

* =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

* Items marked "  " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

* All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
• MF : μ F, PF : μ F

RESISTORS
• All resistors are in ohms
• F : nonflammable

COILS
• MMH : mH, UH : μ H

3

Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
R320	1-246-469-00	CARBON	680 5% 1/4W	R378	1-246-996-00	CARBON	2.2K 5% 1/8W F
R321	1-246-521-00	CARBON	100K 5% 1/4W	R379	1-246-495-00	CARBON	8.2K 5% 1/4W
R322	1-246-469-00	CARBON	680 5% 1/4W	R380	1-246-479-00	CARBON	1.8K 5% 1/4W
R323	1-246-545-00	CARBON	1M 5% 1/4W	R381	1-246-485-00	CARBON	3.3K 5% 1/4W
R324	1-246-529-00	CARBON	220K 5% 1/4W	R382	1-246-485-00	CARBON	3.3K 5% 1/4W
R325	1-246-489-00	CARBON	4.7K 5% 1/4W	R383	1-246-489-00	CARBON	4.7K 5% 1/4W
R326	1-246-480-00	CARBON	2K 5% 1/4W	R384	1-246-521-00	CARBON	100K 5% 1/4W
R327	1-246-475-00	CARBON	1.2K 5% 1/4W	R385	1-246-497-00	CARBON	10K 5% 1/4W
R328	1-246-519-00	CARBON	82K 5% 1/4W	R386	1-246-527-00	CARBON	180K 5% 1/4W
R329	1-246-487-00	CARBON	3.9K 5% 1/4W	R387	1-246-491-00	CARBON	5.6K 5% 1/4W
R330	1-246-491-00	CARBON	5.6K 5% 1/4W	R388	1-246-501-00	CARBON	15K 5% 1/4W
R331	1-246-489-00	CARBON	4.7K 5% 1/4W	R389	1-246-501-00	CARBON	15K 5% 1/4W
R332	1-246-463-00	CARBON	390 5% 1/4W	R390	1-246-521-00	CARBON	100K 5% 1/4W
R333	1-246-457-00	CARBON	220 5% 1/4W	R391	1-246-489-00	CARBON	4.7K 5% 1/4W
R334	1-246-457-00	CARBON	220 5% 1/4W	R392	1-246-521-00	CARBON	100K 5% 1/4W
R335	1-246-465-00	CARBON	470 5% 1/4W	R393	1-246-521-00	CARBON	100K 5% 1/4W
R336	1-246-513-00	CARBON	47K 5% 1/4W	R394	1-246-517-00	CARBON	68K 5% 1/4W
R337	1-246-469-00	CARBON	680 5% 1/4W	R395	1-246-497-00	CARBON	10K 5% 1/4W
R338	1-246-509-00	CARBON	33K 5% 1/4W	R396	1-246-497-00	CARBON	10K 5% 1/4W
R339	1-246-513-00	CARBON	47K 5% 1/4W	R397	1-246-521-00	CARBON	100K 5% 1/4W
R340	1-246-457-00	CARBON	220 5% 1/4W	R398	1-246-501-00	CARBON	15K 5% 1/4W
R341	1-246-469-00	CARBON	680 5% 1/4W	R399	1-246-519-00	CARBON	82K 5% 1/4W
R342	1-246-455-00	CARBON	180 5% 1/4W	R400	1-246-519-00	CARBON	82K 5% 1/4W
R343	1-246-483-00	CARBON	2.7K 5% 1/4W	R401	1-246-515-00	CARBON	56K 5% 1/4W
R344	1-246-493-00	CARBON	6.8K 5% 1/4W	R402	1-246-499-00	CARBON	12K 5% 1/4W
R345	1-246-497-00	CARBON	10K 5% 1/4W	R403	1-246-505-00	CARBON	22K 5% 1/4W
R346	1-246-521-00	CARBON	100K 5% 1/4W	R404	1-246-519-00	CARBON	82K 5% 1/4W
R351	1-246-461-00	CARBON	330 5% 1/4W	R405	1-246-513-00	CARBON	47K 5% 1/4W
R352	1-246-463-00	CARBON	390 5% 1/4W	R406	1-246-521-00	CARBON	100K 5% 1/4W
R353	1-246-473-00	CARBON	1K 5% 1/4W	R407	1-246-507-00	CARBON	27K 5% 1/4W
R354	1-246-497-00	CARBON	10K 5% 1/4W	R408	1-246-497-00	CARBON	10K 5% 1/4W
R355	1-246-507-00	CARBON	27K 5% 1/4W	R409	1-246-491-00	CARBON	5.6K 5% 1/4W
R356	1-246-473-00	CARBON	1K 5% 1/4W	R410	1-246-517-00	CARBON	68K 5% 1/4W
R357	1-246-477-00	CARBON	1.5K 5% 1/4W	R411	1-246-497-00	CARBON	10K 5% 1/4W
R358	1-246-477-00	CARBON	1.5K 5% 1/4W	R412	1-246-505-00	CARBON	22K 5% 1/4W
R359	1-246-529-00	CARBON	220K 5% 1/4W	R413	1-246-457-00	CARBON	220 5% 1/4W
R360	1-246-457-00	CARBON	220 5% 1/4W	R414	1-246-495-00	CARBON	8.2K 5% 1/4W
R361	1-246-475-00	CARBON	1.2K 5% 1/4W	R415	1-246-457-00	CARBON	220 5% 1/4W
R362	1-246-485-00	CARBON	3.3K 5% 1/4W	R416	1-246-495-00	CARBON	8.2K 5% 1/4W
R363	1-246-449-00	CARBON	100 5% 1/4W	R417	1-246-521-00	CARBON	100K 5% 1/4W
R364	1-246-475-00	CARBON	1.2K 5% 1/4W	R418	1-246-545-00	CARBON	1M 5% 1/4W
R365	1-246-517-00	CARBON	68K 5% 1/4W	R419	1-246-479-00	CARBON	1.8K 5% 1/4W
R366	1-246-497-00	CARBON	10K 5% 1/4W	R420	1-246-477-00	CARBON	1.5K 5% 1/4W
R367	1-246-509-00	CARBON	33K 5% 1/4W	R424	1-246-509-00	CARBON	33K 5% 1/4W
R368	1-246-517-00	CARBON	68K 5% 1/4W	R425	1-246-497-00	CARBON	10K 5% 1/4W
R369	1-246-505-00	CARBON	22K 5% 1/4W	R426	1-246-489-00	CARBON	4.7K 5% 1/4W
R370	1-246-517-00	CARBON	68K 5% 1/4W	R427	1-246-477-00	CARBON	1.5K 5% 1/4W
R371	1-246-489-00	CARBON	4.7K 5% 1/4W	R428	1-246-467-00	CARBON	560 5% 1/4W
R372	1-246-511-00	CARBON	39K 5% 1/4W	R429	1-246-501-00	CARBON	15K 5% 1/4W
R373	1-246-509-00	CARBON	33K 5% 1/4W	R431	1-246-509-00	CARBON	33K 5% 1/4W
R374	1-246-509-00	CARBON	33K 5% 1/4W	R432	1-246-501-00	CARBON	15K 5% 1/4W
R375	1-246-513-00	CARBON	47K 5% 1/4W	R433	1-246-517-00	CARBON	68K 5% 1/4W
R376	1-246-491-00	CARBON	5.6K 5% 1/4W	R434	1-246-509-00	CARBON	33K 5% 1/4W
R377	1-246-471-00	CARBON	820 5% 1/4W				

NOTE:

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

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* All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
* MF : μ F, PF : μ F

RESISTORS
* All resistors are in ohms
* F : nonflammable

COILS
* MMH : mH, UH : μ H

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Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark		
C225	1-123-356-00	ELECT	10MF	20%	50V	D212	8-719-815-55	DIODE	1S1555
C226	1-123-336-00	ELECT	470MF	20%	25V	D213	=>8-719-911-19	DIODE	1SS119
C227	1-123-333-00	ELECT	100MF	20%	16V	D214	=>8-719-911-19	DIODE	1SS119
C228	1-123-380-00	ELECT	1MF	20%	50V	D215	=>8-719-911-19	DIODE	1SS119
C229	1-123-333-00	ELECT	100MF	20%	16V	D216	8-719-815-55	DIODE	1S1555
C230	1-123-333-00	ELECT	100MF	20%	16V	D218	=>8-719-911-19	DIODE	1SS119
C231	1-108-367-00	MYLAR	0.0015MF	10%	100V	D219	=>8-719-911-19	DIODE	1SS119
C232	1-108-367-00	MYLAR	0.0015MF	10%	100V	D220	=>8-719-911-19	DIODE	1SS119
C233	1-123-379-00	ELECT	0.47MF	20%	50V	D221	8-719-815-55	DIODE	1S1555
C234	1-123-379-00	ELECT	0.47MF	20%	50V			IC	
C235	1-123-331-00	ELECT	33MF	20%	25V	IC201	8-759-276-30	IC	TA7630P
C236	1-123-332-00	ELECT	47MF	20%	16V	IC202	8-759-313-89	IC	HA1389
C237	1-123-332-00	ELECT	47MF	20%	16V	IC203	8-759-313-89	IC	HA1389
C238	1-123-333-00	ELECT	100MF	20%	16V	IC204	8-759-600-03	IC	M50120P
C239	1-123-333-00	ELECT	100MF	20%	16V	IC205	8-759-178-12	IC	UPC78L12
C240	1-108-367-00	MYLAR	0.0015MF	10%	100V	IC206	8-759-145-58	IC	UPC4558C
C241	1-123-332-00	ELECT	47MF	20%	16V	IC207	8-759-145-58	IC	UPC4558C
C242	1-161-317-00	CERAMIC	330PF	10%	50V	IC208	8-759-178-12	IC	UPC78L12
C243	1-108-389-00	MYLAR	0.1MF	10%	100V			COIL	
C244	1-123-336-00	ELECT	470MF	20%	25V	L201	1-407-488-00	MICRO INDUCTOR	470UH
C246	1-108-630-00	FILM	0.022MF		100V	L202	1-407-169-00	MICRO INDUCTOR	100UH
C247	1-123-321-00	ELECT	220MF	20%	16V			TRANSISTOR	
C248	1-123-380-00	ELECT	1MF	20%	50V	Q201	8-729-178-54	TRANSISTOR	2SC2785
C249	1-161-313-00	CERAMIC	150PF	10%	50V	Q202	8-729-178-54	TRANSISTOR	2SC2785
C250	1-161-313-00	CERAMIC	150PF	10%	50V	Q204	8-729-117-54	TRANSISTOR	2SA1175
C251	1-108-635-00	FILM	0.056MF		100V	Q205	=>8-769-200-10	TRANSISTOR	2SK107-1
C252	1-123-380-00	ELECT	1MF	20%	50V	Q206	8-729-178-54	TRANSISTOR	2SC2785
C253	1-123-382-00	ELECT	3.3MF	20%	50V	Q207	8-729-117-54	TRANSISTOR	2SA1175
C254	1-123-380-00	ELECT	1MF	20%	50V	Q211	8-729-178-54	TRANSISTOR	2SC2785
C255	1-108-389-00	MYLAR	0.1MF	10%	100V	Q212	8-729-178-54	TRANSISTOR	2SC2785
C256	1-108-630-00	FILM	0.022MF		100V	Q213	8-729-109-53	TRANSISTOR	2SD795A
C257	1-123-333-00	ELECT	100MF	20%	25V	Q214	8-729-117-54	TRANSISTOR	2SA1175
C258	1-123-350-00	ELECT	2200MF	20%	35V	Q215	=>8-729-663-47	TRANSISTOR	2SC1364
C259	1-123-380-00	ELECT	1MF	20%	50V			RESISTOR	
C260	1-123-380-00	ELECT	1MF	20%	50V	R200	1-202-653-00	COMPOSITION	2.2M
C261	1-123-332-00	ELECT	47MF	20%	25V	R201	1-246-537-00	CARBON	470K
C262	1-123-380-00	ELECT	1MF	20%	50V	R202	1-246-473-00	CARBON	1K
C263	1-123-333-00	ELECT	100MF	20%	25V	R203	1-246-515-00	CARBON	56K
C264	1-161-047-00	CERAMIC	0.0047MF	30%	50V	R204	1-246-515-00	CARBON	56K
C265	1-123-296-00	ELECT	220MF	20%	6.3V	R205	1-212-875-00	FUSIBLE	56
						R206	1-246-497-00	CARBON	10K
						R207	1-246-529-00	CARBON	220K
						R208	1-246-497-00	CARBON	10K
						R209	1-246-489-00	CARBON	4.7K
						R210	1-246-485-00	CARBON	3.3K
						R211	1-246-537-00	CARBON	470K
						R212	1-246-473-00	CARBON	1K
						R213	1-246-505-00	CARBON	22K
						R214	1-246-487-00	CARBON	3.9K
						R215	1-246-449-00	CARBON	100
						R216	1-246-507-00	CARBON	27K
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FILTER

CF201 1-527-476-00 OSCILLATOR, CERAMIC

DIODE

D201 =>8-719-911-19 DIODE 1SS119
 D202 8-719-100-49 DIODE RD8.2EB3
 D204 =>8-719-911-19 DIODE 1SS119
 D205 8-719-102-90 DIODE RD10EN2
 D206 =>8-719-911-19 DIODE 1SS119
 D207 =>8-719-911-19 DIODE 1SS119
 D208 =>8-719-911-19 DIODE 1SS119
 D209 8-719-100-58 DIODE RD10EB3
 D210 =>8-719-911-19 DIODE 1SS119
 D211 =>8-719-911-19 DIODE 1SS119

NOTE:

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

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CAPACITORS

* MF : μ F, PF : μ F

RESISTORS

* All resistors are in ohms
 * F : nonflammable


COILS

* MMH : mH, UH : μ H


6

Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
R217	1-246-505-00	CARBON	22K 5% 1/4W	R277	1-246-509-00	CARBON	33K 5% 1/4W
R218	1-246-485-00	CARBON	3.3K 5% 1/4W	R278	1-246-513-00	CARBON	47K 5% 1/4W
R219	1-246-489-00	CARBON	4.7K 5% 1/4W	R279	1-246-521-00	CARBON	100K 5% 1/4W
R220	1-246-511-00	CARBON	39K 5% 1/4W	R280	1-246-521-00	CARBON	100K 5% 1/4W
R221	1-246-511-00	CARBON	39K 5% 1/4W	R281	1-246-513-00	CARBON	47K 5% 1/4W
R222	1-246-477-00	CARBON	1.5K 5% 1/4W	R282	1-246-449-00	CARBON	100 5% 1/4W
R223	1-246-477-00	CARBON	1.5K 5% 1/4W	R283	1-246-449-00	CARBON	100 5% 1/4W
R224	1-246-497-00	CARBON	10K 5% 1/4W	R285	1-246-497-00	CARBON	10K 5% 1/4W
R225	1-246-497-00	CARBON	10K 5% 1/4W	R286	1-246-497-00	CARBON	10K 5% 1/4W
R227	1-246-505-00	CARBON	22K 5% 1/4W	R287	1-246-497-00	CARBON	10K 5% 1/4W
R228	1-246-451-00	CARBON	120 5% 1/4W	R288	1-246-463-00	CARBON	390 5% 1/4W
R229	1-213-131-00	METAL	100 5% 1W F	R289	1-246-455-00	CARBON	180 5% 1/4W
R230	1-247-023-00	CARBON	2.2 5% 1/8W F	R290	1-246-501-00	CARBON	15K 5% 1/4W
R231	1-246-473-00	CARBON	1K 5% 1/4W	R291	1-246-517-00	CARBON	68K 5% 1/4W
R232	1-246-449-00	CARBON	100 5% 1/4W	R292	1-246-513-00	CARBON	47K 5% 1/4W
R233	1-246-449-00	CARBON	220 5% 1/4W	R293	1-246-505-00	CARBON	22K 5% 1/4W
R234	1-246-505-00	CARBON	22K 5% 1/4W	R294	1-202-735-00	COMPOSITION	22M 10% 1/2W
R235	1-246-451-00	CARBON	120 5% 1/4W	R295	1-246-477-00	CARBON	1.5K 5% 1/4W
R236	1-213-131-00	METAL	100 5% 1W F	R296	1-246-477-00	CARBON	1.5K 5% 1/4W
R237	1-247-023-00	CARBON	2.2 5% 1/8W F	R297	1-207-616-00	WIREWOUND	0.47 10% 2W F
R238	1-246-473-00	CARBON	1K 5% 1/4W	R298	1-246-495-00	CARBON	8.2K 5% 1/4W
R239	1-246-449-00	CARBON	100 5% 1/4W	R299	1-206-656-00	METAL	470 5% 2W F
R240	1-246-505-00	CARBON	22K 5% 1/4W	<u>VARIABLE RESISTOR</u>			
R241	1-246-491-00	CARBON	5.6K 5% 1/4W				
R242	1-246-505-00	CARBON	22K 5% 1/4W	RV201	1-226-853-00	RES, ADJ, CARBON 47K	
R243	1-202-735-00	COMPOSITION	22M 10% 1/2W	<u>THERMISTOR</u>			
R245	1-246-521-00	CARBON	100K 5% 1/4W				
R246	1-246-505-00	CARBON	22K 5% 1/4W	TH201	1-800-954-00	THERMISTOR S-3K	
R247	1-246-477-00	CARBON	1.5K 5% 1/4W	<u>CONNECTOR</u>			
R248	1-246-477-00	CARBON	1.5K 5% 1/4W				
R249	1-246-481-00	CARBON	2.2K 5% 1/4W	U1	1-560-156-00	PLUG, CONNECTOR (2.5MM PITCH)	
R250	1-246-489-00	CARBON	4.7K 5% 1/4W	U2	1-560-129-00	PLUG, CONNECTOR (2.5MM) 9P	
R251	1-246-509-00	CARBON	33K 5% 1/4W	U3	1-560-128-00	PLUG, CONNECTOR (2.5MM PITCH)	
R252	1-246-497-00	CARBON	10K 5% 1/4W	U4	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
R253	1-246-497-00	CARBON	10K 5% 1/4W	U5	1-508-766-00	4P PLUG (M)	
R254	1-246-497-00	CARBON	10K 5% 1/4W	U7	1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P	
R255	1-246-473-00	CARBON	1K 5% 1/4W	*****			
R256	1-246-497-00	CARBON	10K 5% 1/4W				
R257	1-246-513-00	CARBON	47K 5% 1/4W	1-606-794-00	N BOARD	*****	
R258	1-246-489-00	CARBON	4.7K 5% 1/4W	1-556-018-61	CONNECTOR ASSY (2.5MM) 3P		
R259	1-246-467-00	CARBON	100 5% 1/4W	4-333-624-00	FILM (N), SPECIAL		
R260	1-246-477-00	CARBON	1.5K 5% 1/4W	4-342-117-00	CASE, SHIELD (MAIN), R		
R261	1-246-483-00	CARBON	2.7K 5% 1/4W	4-342-118-00	LID, SHIELD CASE, R		
R262	1-246-465-00	CARBON	470 5% 1/4W	<u>CAPACITOR</u>			
R264	1-246-503-00	CARBON	18K 5% 1/4W				
R265	1-246-497-00	CARBON	10K 5% 1/4W	C1	1-123-617-00	ELECT	10MF 20% 16V
R266	1-246-457-00	CARBON	220 5% 1/4W	C2	1-123-617-00	ELECT	10MF 20% 16V
R267	1-246-505-00	CARBON	22K 5% 1/4W	C3	1-123-617-00	ELECT	10MF 20% 16V
R268	1-246-501-00	CARBON	15K 5% 1/4W	C4	1-161-019-00	CERAMIC	0.033MF 10% 25V
R269	1-246-509-00	CARBON	33K 5% 1/4W	C5	1-108-567-00	MYLAR	0.0033MF 5% 50V
R270	1-247-659-00	CARBON	68 5% 1/4W F	C6	1-123-821-00	ELECT	47MF 20% 16V
R271	1-246-513-00	CARBON	47K 5% 1/4W				
R272	1-246-513-00	CARBON	47K 5% 1/4W				
R273	1-246-509-00	CARBON	33K 5% 1/4W				
R274	1-246-521-00	CARBON	100K 5% 1/4W				
R275	1-246-529-00	CARBON	220K 5% 1/4W				
R276	1-246-521-00	CARBON	100K 5% 1/4W				

NOTE:

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RESISTORS
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COILS
* MMH : mH, UH : μ H



7

Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
<u>COMPOSITION CIRCUIT BLOCK</u>				<u>COIL</u>			
CP1	1-232-234-00	COMPOSITION CIRCUIT BLOCK		L701	1-407-171-XX	MICRO INDUCTOR 150UH	
<u>DIODE</u>				L702	1-407-171-XX	MICRO INDUCTOR 150UH	
D1	8-719-110-32	DIODE PH302B		L703	1-407-171-XX	MICRO INDUCTOR 150UH	
<u>IC</u>				L704	1-407-364-00	COIL, SPOOK CHOKE; 3.3UH	
IC1	8-759-113-73	IC UPC1373H		L705	1-407-690-00	MICRO INDUCTOR 5.6UH	
<u>COIL</u>				<u>TRANSISTOR</u>			
L1	1-404-310-00	COIL		Q701 =>8-729-117-54	TRANSISTOR 2SA1175		
*****				Q702 =>8-729-178-54	TRANSISTOR 2SC2785		
♣:A-1330-364-A	C BOARD, COMPLETE			Q703	8-729-322-78	TRANSISTOR 2SC2278	
*****				Q704 =>8-729-117-54	TRANSISTOR 2SA1175		
♣:1-606-638-00	C BOARD			Q705 =>8-729-178-54	TRANSISTOR 2SC2785		
♣:1-509-828-12	5P CONNECTOR			Q706	8-729-322-78	TRANSISTOR 2SC2278	
1-526-616-00	SOCKET, CRT			Q707 =>8-729-117-54	TRANSISTOR 2SA1175		
♣:1-556-003-61	CONNECTOR ASSY (2.5MM) 6P			Q708 =>8-729-178-54	TRANSISTOR 2SC2785		
<u>CONNECTOR</u>				Q709	8-729-322-78	TRANSISTOR 2SC2278	
C1	♣:1-506-371-00	2P PLUG		<u>RESISTOR</u>			
	♣:1-506-371-00	2P PLUG (L), C1		R701	1-213-149-00	METAL 3.3 5% 1W	F
<u>CAPACITOR</u>				R702	1-206-690-00	METAL 12K 5% 2W	F
C701	1-102-980-00	CERAMIC 270PF 5% 50V		R703	1-246-497-00	CARBON 10K 5% 1/4W	
C702	1-102-980-00	CERAMIC 270PF 5% 50V		R704	1-246-485-00	CARBON 3.3K 5% 1/4W	
C703	1-102-820-00	CERAMIC 330PF 5% 50V		R705	1-246-483-00	CARBON 2.7K 5% 1/4W	
C704	1-102-228-00	CERAMIC 470PF 10% 500V		R706	1-246-461-00	CARBON 330 5% 1/4W	
C705	1-108-385-00	MYLAR 0.047MF 10% 100V		R707	1-246-465-00	CARBON 470 5% 1/4W	
C706	1-123-356-00	ELECT 10MF 20% 50V		R708	1-246-433-00	CARBON 22 5% 1/4W	
C707	1-129-722-00	FILM 0.047MF 10% 630V		R709	1-246-481-00	CARBON 2.2K 5% 1/4W	
C708	1-102-155-00	CERAMIC 330PF 20% 2KV		R711	1-213-149-00	METAL 3.3 5% 1W	F
C709	1-123-332-00	ELECT 47MF 20% 16V		R712	1-206-690-00	METAL 12K 5% 2W	F
C710	1-102-155-00	CERAMIC 330PF 20% 2KV		R713	1-246-497-00	CARBON 10K 5% 1/4W	
C711	1-123-254-00	ELECT 10MF 250V		R714	1-246-485-00	CARBON 3.3K 5% 1/4W	
C712	1-108-385-00	MYLAR 0.047MF 10% 100V		R715	1-246-469-00	CARBON 680 5% 1/4W	
C713	1-123-330-00	ELECT 22MF 20% 16V		R716	1-246-461-00	CARBON 330 5% 1/4W	
<u>DIODE</u>				R717	1-246-465-00	CARBON 470 5% 1/4W	
D701 =>8-719-300-76	DIODE RH1A			R718	1-246-433-00	CARBON 22 5% 1/4W	
D702 =>8-719-300-76	DIODE RH1A			R719	1-246-481-00	CARBON 2.2K 5% 1/4W	
D703 =>8-719-300-76	DIODE RH1A			R721	1-213-149-00	METAL 3.3 5% 1W	F
D704 =>8-719-911-19	DIODE 1SS119			R722	1-206-690-00	METAL 12K 5% 2W	F
D705 =>8-719-911-19	DIODE 1SS119			R723	1-246-497-00	CARBON 10K 5% 1/4W	
D706 =>8-719-911-19	DIODE 1SS119			R724	1-246-485-00	CARBON 3.3K 5% 1/4W	
D707	8-719-100-92	DIODE RD24EB4		R725	1-246-473-00	CARBON 1K 5% 1/4W	
D708 =>8-719-911-19	DIODE 1SS119			R726	1-246-473-00	CARBON 1K 5% 1/4W	
				R727	1-246-460-00	CARBON 300 5% 1/4W	
				R728	1-246-433-00	CARBON 22 5% 1/4W	
				R729	1-246-481-00	CARBON 2.2K 5% 1/4W	
				R731	1-202-585-00	COMPOSITION 3.3K 10% 1/2W	
				R732	1-202-585-00	COMPOSITION 3.3K 10% 1/2W	
				R733	1-202-585-00	COMPOSITION 3.3K 10% 1/2W	
				R734	1-202-628-00	COMPOSITION 200K 10% 1/2W	
				R735	1-202-637-00	COMPOSITION 470K 10% 1/2W	
				R736	1-202-619-00	COMPOSITION 82K 10% 1/2W	
				R737	1-202-549-00	COMPOSITION 100 10% 1/2W	

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CAPACITORS

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RESISTORS

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COILS

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8

Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
R738	1-202-609-00	COMPOSITION 33K 10% 1/2W		C503	1-123-380-00	ELECT 1MF 20% 50V	
R739	1-202-641-00	COMPOSITION 680K 10% 1/2W		C504	1-108-377-00	MYLAR 0.01MF 10% 100V	
R740	1-202-613-00	COMPOSITION 47K 10% 1/2W		C505	1-129-794-00	FILM 0.0033MF 5% 100V	
R741	1-202-645-00	COMPOSITION 1M 10% 1/2W		C506	1-106-180-00	MYLAR 0.0022MF 5% 100V	
<u>VARIABLE RESISTOR</u>				C508	1-108-378-00	MYLAR 0.012MF 10% 100V	
RV701	1-226-848-00	RES, ADJ, CARBON 2.2K		C509	1-131-349-00	TANTALUM 2.2MF 20% 35V	
RV702	1-226-850-00	RES, ADJ, CARBON 4.7K		C510	1-123-586-00	ELECT 0.1MF 20% 50V	
RV703	1-226-848-00	RES, ADJ, CARBON 2.2K		C511	1-106-224-00	MYLAR 0.15MF 10% 100V	
RV704	1-226-850-00	RES, ADJ, CARBON 4.7K		C512	1-123-379-00	ELECT 0.47MF 20% 50V	
RV705	1-226-850-00	RES, ADJ, CARBON 4.7K		C513	1-108-433-00	MYLAR 0.1MF 10% 200V	
RV706	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M		C514	1-123-336-00	ELECT 470MF 20% 25V	
RV707	1-226-114-00	RES, ADJ, METAL GLAZE 2.2M		C515	1-102-228-00	CERAMIC 470PF 10% 500V	
<u>SPARK GAP</u>				C516	1-108-807-00	MYLAR 0.018MF 5% 50V	
SG701	1-519-063-XX	DISCHARGING GAP		C517	1-108-583-00	MYLAR 0.015MF 5% 50V	
SG702	1-519-063-XX	DISCHARGING GAP		C518	1-131-347-00	TANTALUM 1MF 20% 35V	
SG703	1-519-063-XX	DISCHARGING GAP		C519	1-123-380-00	ELECT 1MF 20% 50V	
SG704	1-519-063-XX	DISCHARGING GAP		C520	1-108-385-00	MYLAR 0.047MF 10% 100V	
SG705	1-519-063-XX	DISCHARGING GAP		C521	1-108-365-00	MYLAR 0.001MF 10% 100V	
SG706	1-519-063-XX	DISCHARGING GAP		C522	1-108-381-00	MYLAR 0.022MF 10% 100V	
*****				C523	1-131-448-00	TANTALUM 1MF 5% 35V	
♣:1-606-640-00 V BOARD				C524	1-102-233-00	CERAMIC 33PF 10% 500V	
*****				C525	1-123-380-00	ELECT 1MF 20% 50V	
♣ 1-556-018-71 CONNECTOR ASSY (2.5MM) 3P				C526	1-123-380-00	ELECT 1MF 20% 50V	
♣:4-345-701-00 HOLDER, LED				C527	1-123-586-00	ELECT 0.1MF 20% 50V	
<u>DIODE</u>				C528	1-108-555-00	MYLAR 0.001MF 5% 50V	
D951	8-719-102-34	DIODE SG232D		C529	1-123-321-00	ELECT 220MF 20% 16V	
D952	8-719-106-34	DIODE SR632D		C530	1-123-321-00	ELECT 220MF 20% 16V	
*****				C531	1-123-332-00	ELECT 47MF 20% 16V	
♣:A-1345-370-A D BOARD, COMPLETE				C532	1-130-547-00	FILM 1.5MF 5% 200V	
*****				C533	1-123-360-00	ELECT 100MF 20% 50V	
♣:1-533-087-00 HOLDER, FUSE				C534	1-123-381-00	ELECT 2.2MF 20% 50V	
3-701-353-00 SPACER, MICA				C535	1-123-267-00	ELECT 2.2MF 20% 160V	
3-701-609-00 BUSHING (B), TR				C539	1-121-757-00	ELECT 33MF 160V	
♣:3-701-748-00 CLAMP				C540	1-108-385-00	MYLAR 0.047MF 10% 100V	
♣:4-314-938-01 RETAINER (TO-3), TRANSISTOR				C541	1-101-810-00	CERAMIC 100PF 5% 500V	
♣ 4-323-833-00 HEAT SINK, PIN OUT				C542	1-108-365-00	MYLAR 0.001MF 10% 100V	
♣ 4-336-010-00 HEAT SINK				C543	1-130-229-00	FILM 0.0133MF 3% 1.2KV	
♣ 4-348-704-00 HEAT SINK (A)				C544	1-130-895-00	FILM 0.056MF 5% 400V	
♣ 4-349-941-00 HEAT SINK, V.OUT				C545	1-102-223-00	CERAMIC 0.0047MF 20% 1.6KV	
♣ 4-356-301-00 HEAT SINK (D)				C546	1-123-254-00	ELECT 10MF 250V	
7-685-646-71 SCREW +BVTP 3x8				C547	1-102-038-00	CERAMIC 0.001MF 500V	
7-685-647-71 SCREW +BVTP 3x10				C548	1-123-334-00	ELECT 220MF 20% 25V	
7-685-649-71 SCREW +BVTP 3x14				C549	1-123-333-00	ELECT 100MF 20% 25V	
<u>CAPACITOR</u>				C550	1-102-038-00	CERAMIC 0.001MF 500V	
C501	1-123-333-00	ELECT 100MF 20% 16V		C551	1-123-346-00	ELECT 220MF 20% 35V	
C502	1-123-380-00	ELECT 1MF 20% 50V		C552	1-123-332-00	ELECT 47MF 20% 16V	
				C553	1-108-425-00	MYLAR 0.022MF 10% 200V	
				C554	1-108-429-00	MYLAR 0.047MF 10% 200V	
				C555	1-108-421-00	MYLAR 0.01MF 10% 200V	
				C556	1-130-547-00	FILM 1.5MF 5% 200V	
				C557	1-108-377-00	MYLAR 0.01MF 10% 100V	
				C558	1-161-961-00	CERAMIC 0.0022MF 10% 3KV	
				C559	1-123-380-00	ELECT 1MF 20% 50V	

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Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
C560	1-108-387-00	MYLAR 0.068MF 10% 100V		D10	1-506-348-XX	PLUG, 5P	
C561	1-108-382-00	MYLAR 0.027MF 10% 100V		D11	⚡:1-560-125-00	PLUG, CONNECTOR (2.5MM) 5P	
C562	1-108-382-00	MYLAR 0.027MF 10% 100V		D12	⚡:1-508-766-00	4P PLUG (M)	
C563	1-123-380-00	ELECT 1MF 20% 50V		D14	⚡:1-508-766-00	4P PLUG (M)	
C564	1-123-332-00	ELECT 47MF 20% 16V				DIODE	
C565	1-108-389-00	MYLAR 0.1MF 10% 100V		D502	=>8-719-911-19	DIODE 1SS119	
C566	1-123-328-00	ELECT 4.7MF 20% 25V		D503	=>8-719-911-19	DIODE 1SS119	
C567	1-130-162-00	FILM 0.33MF 5% 200V		D504	=>8-719-911-19	DIODE 1SS119	
C568	1-108-389-00	MYLAR 0.1MF 10% 100V		D505	=>8-719-900-93	DIODE V09C	
C569	1-102-233-00	CERAMIC 33PF 10% 500V		D507	=>8-719-305-15	DIODE GH3F	
C570	1-108-561-00	MYLAR 0.0018MF 5% 50V		D509	8-719-903-09	DIODE V30N	
C571	1-102-050-00	CERAMIC 0.01MF 500V		D510	8-719-300-76	DIODE RH1A	
C572	1-102-234-00	CERAMIC 270PF 10% 500V		D511	=>8-719-305-15	DIODE GH3F	
C573	1-101-004-00	CERAMIC 0.01MF 50V		D512	=>8-719-305-15	DIODE GH3F	
C601	⚠ 1-130-238-00	FILM 0.22MF 20% 300V		D513	=>8-719-900-93	DIODE V09C	
C602	⚠ 1-108-913-00	FILM 0.22MF 20% 300V		D514	=>8-719-900-93	DIODE V09C	
C603	1-102-085-00	CERAMIC 0.0047MF 500V		D515	=>8-719-911-19	DIODE 1SS119	
C604	⚠ 1-102-085-00	CERAMIC 0.0047MF 500V		D516	8-719-928-08	DIODE ERD28-08S	
C605	1-161-953-00	FILM 0.0047MF 20% 400V		D517	=>8-719-911-19	DIODE 1SS119	
C606	1-125-287-00	ELECT (BLOCK) 330MF 400V		D518	=>8-719-911-19	DIODE 1SS119	
C607	1-123-360-00	ELECT 100MF 20% 50V		D601	8-719-503-06	DIODE S3WB60Z	
C608	1-108-376-00	MYLAR 0.0082MF 10% 100V		D605	=>8-719-900-93	DIODE V09C	
C609	1-102-959-00	CERAMIC 22PF 5% 50V		D606	8-719-100-68	DIODE RD13EB2	
C610	1-123-332-00	ELECT 47MF 20% 16V		D608	=>8-719-901-83	DIODE 1SS83	
C611	1-123-381-00	ELECT 2.2MF 20% 50V		D609	=>8-719-901-83	DIODE 1SS83	
C612	1-123-323-00	ELECT 470MF 20% 16V		D610	8-719-901-91	DIODE V19B	
C613	1-108-375-00	MYLAR 0.0068MF 10% 100V		D611	=>8-719-928-08	DIODE ERD28-08	
C614	1-129-706-61	FILM 0.0022MF 10% 630V		D612	=>8-719-900-26	DIODE ERD29-08J	
C615	1-121-757-00	ELECT 33MF 160V		D613	8-719-901-91	DIODE V19B	
C616	1-123-350-00	ELECT 2200MF 20% 35V		D614	8-719-981-00	DIODE ERC81-004	
C618	1-123-336-00	ELECT 470MF 20% 25V		D615	8-719-901-39	DIODE V06J	
C619	1-123-326-00	ELECT 3300MF 20% 16V		D616	=>8-719-200-02	DIODE 10E2	
C620	1-102-327-00	CERAMIC 330PF 15% 1.5KV		D617	=>8-719-200-02	DIODE 10E2	
C621	1-102-085-00	CERAMIC 0.0047MF 500V				CONNECTOR	
C622	⚠ 1-161-953-00	FILM 0.0047MF 20% 400V		DY1	1-506-348-XX	3P PLUG (L)	
C623	⚠ 1-161-953-00	FILM 0.0047MF 20% 400V		DY2	1-506-348-XX	3P PLUG (L)	
C624	1-161-953-00	FILM 0.0047MF 20% 400V				FUSE	
C625	⚠ 1-108-913-00	FILM 0.22MF 20% 300V		F601	⚠ 1-532-237-00	FUSE, 3.15A	
C626	1-161-739-00	CERAMIC 0.01MF 20% 400V				IC	
C630	1-108-393-00	MYLAR 0.22MF 10% 100V		IC501	8-759-878-03	IC LA7802	
C631	1-102-002-00	CERAMIC 680PF 10% 500V		IC502	8-759-103-68	IC UPC1368H2	
C632	1-102-030-00	CERAMIC 330PF 10% 500V		IC503	8-759-979-16	IC CX-7916	
C633	1-102-030-00	CERAMIC 330PF 10% 500V		IC504	8-719-907-13	DIODE PC713	
C634	1-102-327-00	CERAMIC 330PF 15% 1.5KV		IC505	8-759-700-06	IC NJM7812B	
C635	1-108-369-00	MYLAR 0.0022MF 10% 100V		IC601	8-759-046-00	IC TDA4600	
		CONNECTOR				COIL	
D1	1-506-348-XX	3P PLUG (L)		L501	1-407-494-00	MICRO INDUCTOR 1.5MMH	
D2	1-506-348-XX	3P PLUG (L)		L502	1-408-225-00	MICRO INDUCTOR 3.3UH	
D3	1-506-348-XX	3P PLUG (L)		L503	1-407-365-00	COIL, CHOKE; 0.7UH	
D4	1-508-765-00	3P PLUG (M)					
D5	⚡:1-560-290-00	PLUG, CONNECTOR (2.5MM PITCH)					
D6	⚡:1-508-768-00	6P PLUG					
D7	⚡:1-508-784-00	1P PLUG					
D9	⚡:1-508-786-00	2P PLUG (M)					

NOTE:

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* Items marked "⚡" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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CAPACITORS
* MF : μ F, PF : μ F

RESISTORS
* All resistors are in ohms
* F : nonflammable

COILS
* MMH : mH, UH : μ H

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Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
L504	1-459-390-00	COIL (WITH CORE); 390UH		R518	1-246-529-00	CARBON 220K 5% 1/4W	
L505	1-459-241-00	COIL, HORIZONTAL LINIALITY; HLC		R519	1-246-487-00	CARBON 3.9K 5% 1/4W	
L506	1-459-104-00	COIL, DUST CORE; 10MMH		R520	1-246-525-00	CARBON 150K 5% 1/4W	
L507	1-407-166-XX	MICRO INDUCTOR 56UH		R521	1-246-531-00	CARBON 270K 5% 1/4W	
L508	1-459-123-00	COIL, DUST CORE(PAC); 1.4MMH		R522	1-247-613-00	CARBON 6.8K 5% 1/8W	
L509	1-421-329-00	COIL, CHOKE; 10UH		R523	1-246-459-00	CARBON 270 5% 1/4W	
L510	1-459-104-00	COIL, DUST CORE; 10MMH		R524	1-246-511-00	CARBON 39K 5% 1/4W	
L602	1-408-225-00	MICRO INDUCTOR 3.3UH		R525	1-246-529-00	CARBON 220K 5% 1/4W	
L603	1-425-613-00	COIL, AIR-CORE, QF TYPE		R526	1-246-475-00	CARBON 1.2K 5% 1/4W	
L604	1-459-215-00	CORE COIL; 12UH		R527	1-246-461-00	CARBON 330 5% 1/4W	
L605	1-408-225-00	MICRO INDUCTOR 3.3UH		R528	1-246-481-00	CARBON 2.2K 5% 1/4W	
L606	1-408-225-00	MICRO INDUCTOR 3.3UH		R529	1-214-722-00	METAL 510 1% 1/4W	
L608	1-408-225-00	MICRO INDUCTOR 3.3UH		R530	1-246-485-00	CARBON 3.3K 5% 1/4W	
L609	1-408-415-00	MICRO INDUCTOR 33UH		R531	1-202-657-15	COMPOSITION 3.3M 5% 1/2W	
				R532	1-213-132-00	METAL 120 5% 1W F	
				R533	1-246-483-00	CARBON 2.7K 5% 1/4W	
				R534	1-246-497-00	CARBON 10K 5% 1/4W	
				R535	1-246-491-00	CARBON 5.6K 5% 1/4W	
				R536	1-246-521-00	CARBON 100K 5% 1/4W	
				R537	1-246-485-00	CARBON 3.3K 5% 1/4W	
				R538	1-246-507-00	CARBON 27K 5% 1/4W	
				R539	1-246-497-00	CARBON 10K 5% 1/4W	
				R540	1-246-497-00	CARBON 10K 5% 1/4W	
				R541	1-246-517-00	CARBON 68K 5% 1/4W	
				R542	1-214-785-00	METAL 220K 1% 1/4W	
				R543	1-246-506-00	CARBON 24K 5% 1/4W	
				R544	1-246-497-00	CARBON 10K 5% 1/4W	
				R545	1-246-465-00	CARBON 470 5% 1/4W	
				R546	1-213-137-00	METAL 330 5% 1W F	
				R547	1-213-138-00	METAL 390 5% 1W F	
				R548	1-246-489-00	CARBON 4.7K 5% 1/4W	
				R549	1-246-509-00	CARBON 33K 5% 1/4W	
				R550	1-246-473-00	CARBON 1K 5% 1/4W	
				R551	1-246-497-00	CARBON 10K 5% 1/4W	
				R552	1-246-519-00	CARBON 82K 5% 1/4W	
				R553	1-246-505-00	CARBON 22K 5% 1/4W	
				R554	1-246-509-00	CARBON 33K 5% 1/4W	
				R555	1-212-371-00	METAL 8.2 5% 1W F	
				R556	1-246-461-00	CARBON 330 5% 1/4W	
				R557	1-206-684-00	METAL 6.8K 5% 2W F	
				R558	1-246-995-00	CARBON 1.8K 5% 1/8W F	
				R559	1-246-783-00	CARBON 1K 5% 1/8W F	
				R560	1-246-979-00	CARBON 1.2 5% 1/8W F	
				R561	1-246-997-00	CARBON 1.2 5% 1/4W F	
				R562	1-246-979-00	CARBON 1.2 5% 1/8W F	
				R563	1-202-597-00	COMPOSITION 10K 5% 1/2W	
				R564	1-246-491-00	CARBON 5.6K 5% 1/4W	
				R565	1-214-913-00	METAL 100K 1% 1/2W	
				R566	1-213-147-00	METAL 2.2K 5% 1W F	
				R567	1-246-457-00	CARBON 220 5% 1/4W	
				R568	1-246-513-00	CARBON 47K 5% 1/4W	
				R569	1-246-503-00	CARBON 18K 5% 1/4W	
				R570	1-246-485-00	CARBON 3.3K 5% 1/4W	

TRANSISTOR

Q501	8-729-168-82	TRANSISTOR 2SC2688
Q502	8-729-178-54	TRANSISTOR 2SC2785
Q503	8-729-341-34	TRANSISTOR 2SC1413A
Q504	8-729-117-54	TRANSISTOR 2SA1175
Q505	8-729-178-54	TRANSISTOR 2SC2785
Q506	8-729-178-54	TRANSISTOR 2SC2785
Q507	8-729-117-54	TRANSISTOR 2SA1175
Q508	8-729-178-54	TRANSISTOR 2SC2785
Q509	8-729-178-54	TRANSISTOR 2SC2785
Q510	8-729-178-54	TRANSISTOR 2SC2785
Q513	8-729-178-54	TRANSISTOR 2SC2785
Q514	8-729-178-54	TRANSISTOR 2SC2785
Q515	8-729-117-54	TRANSISTOR 2SA1175
Q516	8-729-178-54	TRANSISTOR 2SC2785
Q517	8-729-117-54	TRANSISTOR 2SA1175
Q518	8-729-313-42	TRANSISTOR 2SD1134
Q601	8-729-281-10	TRANSISTOR 2SD811
Q602	8-719-000-28	THYRISTOR CRO2AM-8

RESISTOR

R501	1-205-607-00	CEMENT-COATED 18K 10% 5W
R502	1-246-494-00	CARBON 7.5K 5% 1/4W
R503	1-246-511-00	CARBON 39K 5% 1/4W
R504	1-246-499-00	CARBON 12K 5% 1/4W
R506	1-246-475-00	CARBON 1.2K 5% 1/4W
R507	1-246-501-00	CARBON 15K 5% 1/4W
R508	1-246-509-00	CARBON 33K 5% 1/4W
R509	1-246-523-00	CARBON 120K 5% 1/4W
R510	1-246-505-00	CARBON 22K 5% 1/4W
R511	1-246-499-00	CARBON 12K 5% 1/4W
R512	1-246-463-00	CARBON 390 5% 1/4W
R513	1-214-769-00	METAL 47K 1% 1/4W
R514	1-246-463-00	CARBON 390 5% 1/4W
R515	1-212-362-00	METAL 1.5 5% 1W F
R516	1-214-777-00	METAL 100K 1% 1/4W
R517	1-214-770-00	METAL 51K 1% 1/4W

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CAPACITORS

• MF : μ F, PF : μ F

RESISTORS

• All resistors are in ohms
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COILS

• MMH : mH, UH : μ H

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Ref.No	Part No	Description				Remark	Ref.No	Part No	Description				Remark
R577	1-246-481-00	CARBON	2.2K	5%	1/4W		RV502	1-224-248-XX	RES, ADJ, METAL GLAZE 470				
R578	1-246-531-00	CARBON	270K	5%	1/4W		RV503	1-226-846-00	RES, ADJ, CARBON 470				
R579	1-246-489-00	CARBON	4.7K	5%	1/4W		RV504	1-226-855-00	RES, ADJ, CARBON 220K				
R580	1-246-499-00	CARBON	12K	5%	1/4W		RV505	1-226-851-00	RES, ADJ, CARBON 10K				
R581	1-246-485-00	CARBON	3.3K	5%	1/4W		RV506	1-223-102-00	RES, ADJ, WIREWOUND 120				
R582	1-206-684-00	METAL	6.8K	5%	2W	F	RV507	1-226-846-00	RES, ADJ, CARBON 470				
R583	1-246-461-00	CARBON	330	5%	1/4W		RV601	1-226-850-00	RES, ADJ, CARBON 4.7K				
R584	1-246-517-00	CARBON	68K	5%	1/4W		SPARK GAP						
R585	1-246-473-00	CARBON	1K	5%	1/4W		SG501	1-519-063-XX	DISCHARGING GAP				
R586	1-246-473-00	CARBON	1K	5%	1/4W		TRANSFORMER						
R587	1-246-509-00	CARBON	33K	5%	1/4W		T501	1-437-078-00	TRANSFORMER, HORIZONTAL DRIVE; HDT				
R588	1-246-481-00	CARBON	2.2K	5%	1/4W		T503	1-421-520-00	TRANSFORMER, FERRITE (PHT)				
R589	1-246-473-00	CARBON	1K	5%	1/4W		T601	1-421-519-00	TRANSFORMER, FERRITE (SRT)				
R590	1-246-497-00	CARBON	10K	5%	1/4W		T602	1-421-352-00	TRANSFORMER, FERRITE				
R591	1-246-503-00	CARBON	18K	5%	1/4W		T603	1-441-855-00	TRANSFORMER, HEATER INSULATION				
							T604	1-421-357-00	TRANSFORMER, LINE FILTER				
							THERMISTOR						
R592	1-246-519-00	CARBON	82K	5%	1/4W		TH501	1-800-944-00	THERMISTOR TH-4700				
R593	1-246-481-00	CARBON	2.2K	5%	1/4W		TH601	1-800-820-00	THERMISTOR, POWER				
R594	1-246-481-00	CARBON	2.2K	5%	1/4W		THP601	1-806-387-00	THERMISTOR (POSITIVE)				
R595	1-246-519-00	CARBON	82K	5%	1/4W		THP602	1-806-449-21	THERMISTOR (POSITIVE)				
R596	1-246-481-00	CARBON	2.2K	5%	1/4W		POST PIN						
							TP12	1-536-354-00	POST PIN				
							TP91	1-536-354-00	POST PIN				

							1-606-639-00	H BOARD					

							1-555-954-51	CONNECTOR ASSY (2.5MM) 9P					
							1-555-958-61	CONNECTOR ASSY (2.5MM) 2P					
							1-556-236-00	CONNECTOR ASSY (2.5MM) 8P					
							RESISTOR						
R603	1-247-687-00	CARBON	6.8M	10%	1W		R902	1-246-537-00	CARBON	470K	5%	1/4W	
R604	1-244-933-51	CARBON	330K	5%	1/2W		VARIABLE RESISTOR						
R605	1-212-356-00	METAL	0.47	5%	1W	F	RV901	1-228-583-00	RES, VAR, CARBON 20K				
R606	1-246-493-00	CARBON	6.8K	5%	1/4W		RV902	1-228-582-00	RES, VAR, CARBON 20K				
R607	1-210-859-00	CARBON	1.2	5%	1/8W	F	RV903	1-228-582-00	RES, VAR, CARBON 20K				
							RV904	1-228-582-00	RES, VAR, CARBON 20K				
R608	1-244-931-51	CARBON	270K	5%	1/2W		RV905	1-228-583-00	RES, VAR, CARBON 20K				
R609	1-246-499-00	CARBON	12K	5%	1/4W								
R610	1-246-475-00	CARBON	1.2K	5%	1/4W		RV906	1-228-583-00	RES, VAR, CARBON 20K				
R611	1-246-497-00	CARBON	10K	5%	1/4W		RV907	1-228-582-00	RES, VAR, CARBON 20K				
R612	1-246-461-00	CARBON	330	5%	1/4W		RV908	1-228-582-00	RES, VAR, CARBON 20K				
							RV909	1-228-583-00	RES, VAR, CARBON 20K				
R613	1-246-481-00	CARBON	2.2K	5%	1/4W		SWITCH						
R614	1-246-491-00	CARBON	5.6K	5%	1/4W		SW901	1-552-656-00	SWITCH, SLIDE				
R615	1-244-931-51	CARBON	270K	5%	1/2W								
R616	1-206-519-00	METAL	22	5%	3W	F							
R617	1-207-451-00	WIREWOUND	0.1	10%	1/2W								
R618	1-213-125-00	METAL	33	5%	1W	F							
R619	1-246-981-00	CARBON	4.7	5%	1/8W	F							
R620	1-244-929-51	CARBON	220K	5%	1/2W								
R623	1-202-728-00	COMPOSITION	5.6M	10%	1/2W								
R625	1-247-687-00	CARBON	6.8M	10%	1W								
R1501	1-211-409-00	CARBON	10	5%	1/8W	F							
R1502	1-246-527-00	CARBON	180K	5%	1/4W								
R1503	1-246-461-00	CARBON	330	5%	1/4W								
R1504	1-246-497-00	CARBON	10K	5%	1/4W								
R1505	1-246-473-00	CARBON	1K	5%	1/4W								
R1506	1-246-497-00	CARBON	10K	5%	1/4W								
VARIABLE RESISTOR													
RV501	1-228-160-11	RES, ADJ, METAL GLAZE 5K											

NOTE:

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\Rightarrow : Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

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All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
 \cdot MF : μ F, PF : μ μ F

RESISTORS
 \cdot All resistors are in ohms
 \cdot F : nonflammable

COILS
 \cdot MMH : mH, UH : μ H

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Ref.No	Part No	Description	Remark	Ref.No	Part No	Description	Remark
♣:A-1327-002-A	T BOARD, COMPLETE	*****		D1093=>8-719-911-19	DIODE 1SS119		
♣:4-348-704-00	HEAT SINK (A)			IC			
	CAPACITOR			IC1001 8-759-113-87	IC UPC1387C		
C1001 1-123-295-00	ELECT	100MF	20%	6.3V			
C1002 1-123-333-00	ELECT	100MF	20%	16V			
C1003 1-123-318-00	ELECT	33MF	20%	16V			
C1004 1-123-333-00	ELECT	100MF	20%	16V			
C1005 1-123-332-00	ELECT	47MF	20%	16V			
C1006 1-123-333-00	ELECT	100MF	20%	16V			
C1007 1-123-332-00	ELECT	47MF	20%	16V			
C1009 1-123-328-00	ELECT	4.7MF	20%	25V			
C1010 1-123-352-00	ELECT	1MF		50V			
C1011 1-123-330-00	ELECT	22MF	20%	16V			
C1021 1-123-330-00	ELECT	22MF	20%	16V			
C1031 1-123-330-00	ELECT	22MF	20%	16V			
C1041 1-123-311-00	ELECT	1000MF	20%	10V			
C1042 1-123-311-00	ELECT	1000MF	20%	10V			
C1043 1-161-268-00	CERAMIC	56PF	5%	50V			
C1044 1-123-299-00	ELECT	1000MF	20%	6.3V			
C1045 1-123-356-00	ELECT	10MF	20%	16V			
C1046 1-123-310-00	ELECT	470MF	20%	10V			
C1051 1-123-332-00	ELECT	47MF	20%	16V			
C1052 1-123-332-00	ELECT	47MF	20%	16V			
C1061 1-123-356-00	ELECT	10MF	20%	16V			
C1062 1-123-356-00	ELECT	10MF	20%	16V			
C1063 1-123-318-00	ELECT	33MF	20%	16V			
C1071 1-123-356-00	ELECT	10MF	20%	16V			
C1072 1-123-356-00	ELECT	10MF	20%	16V			
C1073 1-123-318-00	ELECT	33MF	20%	16V			
C1083 1-123-381-00	ELECT	2.2MF	20%	50V			
C1090 1-102-085-00	CERAMIC	0.0047MF		500V			
C1095 1-161-323-00	CERAMIC	0.001MF	10%	50V			
	COMPOSITION CIRCUIT BLOCK						
CP1001 0-553-043-00	COMPOSITION CIRCUIT BLOCK						
CP1002 0-553-043-00	COMPOSITION CIRCUIT BLOCK						
CP1003 0-553-061-00	COMPOSITION CIRCUIT BLOCK						
CP1004 0-553-058-00	COMPOSITION CIRCUIT BLOCK						
CP1005 0-553-059-00	COMPOSITION CIRCUIT BLOCK						
	DIODE						
D1001 8-719-100-20	DIODE RD3.9EB1						
D1002=>8-719-911-19	DIODE 1SS119						
D1003=>8-719-911-19	DIODE 1SS119						
D1004 8-719-100-41	DIODE RD6.8EB2						
D1051=>8-719-911-19	DIODE 1SS119						
D1052=>8-719-911-19	DIODE 1SS119						
D1053=>8-719-911-19	DIODE 1SS119						
D1082=>8-719-911-19	DIODE 1SS119						
D1083=>8-719-911-19	DIODE 1SS119						
D1084=>8-719-911-19	DIODE 1SS119						
	TRANSISTOR						
Q1001 8-729-109-53	TRANSISTOR 2SD795A						
Q1002 8-729-109-53	TRANSISTOR 2SD795A						
Q1003 8-729-117-54	TRANSISTOR 2SA1175						
Q1004 8-729-178-54	TRANSISTOR 2SC2785						
Q1005 8-729-117-54	TRANSISTOR 2SA1175						
Q1006 8-729-178-54	TRANSISTOR 2SC2785						
Q1007 8-729-117-54	TRANSISTOR 2SA1175						
Q1010 8-729-384-48	TRANSISTOR 2SA844						
Q1011=>8-729-603-50	TRANSISTOR 2SC403SP						
Q1012=>8-729-603-50	TRANSISTOR 2SC403SP						
Q1020 8-729-384-48	TRANSISTOR 2SA844						
Q1021=>8-729-603-50	TRANSISTOR 2SC403SP						
Q1022=>8-729-603-50	TRANSISTOR 2SC403SP						
Q1030 8-729-384-48	TRANSISTOR 2SA844						
Q1031=>8-729-603-50	TRANSISTOR 2SC403SP						
Q1032=>8-729-603-50	TRANSISTOR 2SC403SP						
Q1041 8-729-178-54	TRANSISTOR 2SC2785						
Q1042 8-729-178-54	TRANSISTOR 2SC2785						
Q1043 8-729-178-54	TRANSISTOR 2SC2785						
Q1044 8-729-178-54	TRANSISTOR 2SC2785						
Q1051 8-729-178-54	TRANSISTOR 2SC2785						
Q1052 8-729-178-54	TRANSISTOR 2SC2785						
Q1061 8-729-178-54	TRANSISTOR 2SC2785						
Q1062 8-729-178-54	TRANSISTOR 2SC2785						
Q1071 8-729-178-54	TRANSISTOR 2SC2785						
Q1072 8-729-178-54	TRANSISTOR 2SC2785						
Q1081 8-729-178-54	TRANSISTOR 2SC2785						
Q1082 8-729-117-54	TRANSISTOR 2SA1175						
Q1083 8-729-178-54	TRANSISTOR 2SC2785						
Q1095 8-729-603-50	TRANSISTOR 2SC403SP						
	RESISTOR						
R1001 1-212-361-00	METAL	1.2	5%	1W	F		
R1002 1-212-355-00	METAL	0.39	5%	1W	F		
R1003 1-246-449-00	CARBON	100	5%	1/4W			
R1004 1-246-457-00	CARBON	220	5%	1/4W			
R1005 1-213-141-00	METAL	680	5%	1W	F		
R1006 1-206-491-51	METAL	1.5	5%	3W	F		
R1007 1-206-491-51	METAL	1.5	5%	3W	F		
R1008 1-246-465-00	CARBON	470	5%	1/4W			
R1009 1-246-471-00	CARBON	820	5%	1/4W			
R1011 1-246-449-00	CARBON	100	5%	1/4W			
R1012 1-246-485-00	CARBON	3.3K	5%	1/4W			
R1013 1-246-481-00	CARBON	2.2K	5%	1/4W			
R1015 1-246-465-00	CARBON	470	5%	1/4W			
R1016 1-246-446-00	CARBON	75	5%	1/4W			
R1017 1-246-457-00	CARBON	220	5%	1/4W			

NOTE:

The components identified by shading and mark ♣ are critical for safety. Replace only with part number specified.

• =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

• Items marked "♣" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
• MF : μ F, PF : μ F

RESISTORS
• All resistors are in ohms
• F : nonflammable

COILS
• MMH : mH, UH : μ H

T

2

Ref.No	Part No	Description	Remark
R1018	1-246-451-00	CARBON 120 5%	1/4W
R1019	1-246-447-00	CARBON 82 5%	1/4W
R1021	1-246-449-00	CARBON 100 5%	1/4W
R1022	1-246-485-00	CARBON 3.3K 5%	1/4W
R1023	1-246-481-00	CARBON 2.2K 5%	1/4W
R1025	1-246-465-00	CARBON 470 5%	1/4W
R1026	1-246-446-00	CARBON 75 5%	1/4W
R1027	1-246-457-00	CARBON 220 5%	1/4W
R1028	1-246-457-00	CARBON 220 5%	1/4W
R1029	1-246-481-00	CARBON 2.2K 5%	1/4W
R1030	1-246-457-00	CARBON 220 5%	1/4W
R1031	1-246-449-00	CARBON 100 5%	1/4W
R1032	1-246-485-00	CARBON 3.3K 5%	1/4W
R1033	1-246-481-00	CARBON 2.2K 5%	1/4W
R1035	1-246-465-00	CARBON 470 5%	1/4W
R1036	1-246-446-00	CARBON 75 5%	1/4W
R1037	1-246-457-00	CARBON 220 5%	1/4W
R1038	1-246-457-00	CARBON 220 5%	1/4W
R1039	1-212-356-00	METAL 0.47 5%	1W
R1040	1-246-451-00	CARBON 120 5%	1/4W
R1041	1-246-473-00	CARBON 1K 5%	1/4W
R1042	1-246-473-00	CARBON 1K 5%	1/4W
R1043	1-246-473-00	CARBON 1K 5%	1/4W
R1044	1-246-473-00	CARBON 1K 5%	1/4W
R1045	1-246-473-00	CARBON 1K 5%	1/4W
R1046	1-246-473-00	CARBON 1K 5%	1/4W
R1047	1-246-446-00	CARBON 75 5%	1/4W
R1048	1-246-461-00	CARBON 330 5%	1/4W
R1049	1-246-461-00	CARBON 330 5%	1/4W
R1050	1-246-469-00	CARBON 680 5%	1/4W
R1051	1-246-507-00	CARBON 27K 5%	1/4W
R1052	1-246-497-00	CARBON 10K 5%	1/4W
R1053	1-246-473-00	CARBON 1K 5%	1/4W
R1054	1-246-446-00	CARBON 75 5%	1/4W
R1055	1-246-509-00	CARBON 33K 5%	1/4W
R1056	1-246-495-00	CARBON 8.2K 5%	1/4W
R1057	1-246-513-00	CARBON 47K 5%	1/4W
R1058	1-246-483-00	CARBON 2.7K 5%	1/4W
R1059	1-246-483-00	CARBON 2.7K 5%	1/4W
R1060	1-246-473-00	CARBON 1K 5%	1/4W
R1061	1-246-517-00	CARBON 68K 5%	1/4W
R1064	1-246-517-00	CARBON 68K 5%	1/4W
R1066	1-246-469-00	CARBON 680 5%	1/4W
R1067	1-246-509-00	CARBON 33K 5%	1/4W
R1068	1-246-469-00	CARBON 680 5%	1/4W
R1069	1-246-505-00	CARBON 22K 5%	1/4W
R1070	1-246-473-00	CARBON 1K 5%	1/4W
R1071	1-246-517-00	CARBON 68K 5%	1/4W
R1074	1-246-517-00	CARBON 68K 5%	1/4W
R1076	1-246-469-00	CARBON 680 5%	1/4W
R1077	1-246-509-00	CARBON 33K 5%	1/4W
R1078	1-246-469-00	CARBON 680 5%	1/4W
R1079	1-246-505-00	CARBON 22K 5%	1/4W

Ref.No	Part No	Description	Remark
R1080	1-246-497-00	CARBON 10K 5%	1/4W
R1081	1-246-513-00	CARBON 47K 5%	1/4W
R1082	1-246-473-00	CARBON 1K 5%	1/4W
R1083	1-246-501-00	CARBON 15K 5%	1/4W
R1084	1-246-505-00	CARBON 22K 5%	1/4W
R1085	1-246-501-00	CARBON 15K 5%	1/4W
R1086	1-246-505-00	CARBON 22K 5%	1/4W
R1089	1-246-465-00	CARBON 470 5%	1/4W
R1090	1-246-433-00	CARBON 22 5%	1/4W
R1091	1-246-521-00	CARBON 100K 5%	1/4W
R1092	1-246-515-00	CARBON 56K 5%	1/4W
R1095	1-246-446-00	CARBON 75 5%	1/4W
R1096	1-246-469-00	CARBON 680 5%	1/4W
R1097	1-246-475-00	CARBON 1.2K 5%	1/4W

VARIABLE RESISTOR

RV1001	1-226-851-00	RES, ADJ, CARBON 10K
RV1002	1-226-845-00	RES, ADJ, CARBON 330

CONNECTOR

T1	1-560-156-00	PLUG, CONNECTOR (2.5MM PITCH)
T2	1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P
T3	1-508-766-00	4P PLUG (M)
T4	1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P
T5	1-560-686-00	CONNECTOR (PLUG) 34P
T6	1-561-534-00	SOCKET 21P
T7	1-508-784-00	1P PLUG

2-02354312-3.
 02968. ~~1000~~
 Sony. P1911.

NOTE:

The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

• =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

• Items marked " Δ " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
 • MF : μ F, PF : μ F

RESISTORS
 • All resistors are in ohms
 • F : nonflammable

COILS
 • MMH : mH, UH : μ H

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Ref.No	Part No	Description	Remark
MISCELLANEOUS *****			
	1-452-146-00	MAGNET	
	⚠:1-551-611-00	CONNECTOR ASSY, MINI (2P)	
	⚠:1-551-616-00	CONNECTOR ASSY, MINIATURE 4P	
	⚠:1-555-328-00	CONNECTOR, PLUG HOUSING 1P	
	⚠:1-555-966-51	CONNECTOR ASSY (2.5MM) 5P	
	⚠:1-556-056-61	CONNECTOR ASSY (LARG) 3P (UK ONLY)	
	⚠:1-556-056-71	CONNECTOR ASSY (LARG) 3P	
	⚠:1-556-056-81	CONNECTOR ASSY (LARG) 3P	
	⚠:1-556-099-61	CONNECTOR ASSY (L) 2P	
	⚠:1-556-238-00	CONNECTOR ASSY (2.5MM) 8P	
	⚠:1-561-023-00	CONNECTOR ASSY, 6P	
	⚠:1-561-867-00	INLET 2P	
	⚠:1-536-700-00	TERMINAL BOARD, INPUT OUTPUT	
L901	⚠:1-426-087-41	COIL, DEGAUSSING	
L902	⚠:1-426-087-41	COIL, DEGAUSSING	
L904	⚠:1-451-204-00	DEFLECTION YOKE (SY-108B)	
L905	⚠:1-451-204-00	DEFLECTION YOKE (SY-108B)	
	⚠:1-228-253-31	RESISTOR ASSY, HIGH-VOLTAGE	
S902	⚠:1-553-225-00	SWITCH, PUSH	
T502	⚠:1-439-280-00	TRANSFORMER ASSY, FLYBACK	
V901	⚠:1-8-738-702-05	CRT (520SB22)	

ACCESSORIES AND PACKING MATERIALS *****

Part.No	Description	Remark
1-551-475-31	CABLE ASSY	
1-551-842-00	CORD, CONNECTION (RK-105A)	
⚠:1-555-234-00	CORD, POWER (AEP ONLY)	
⚠:1-551-218-00	CORD POWER (DK-50) (UK ONLY)	
3-701-630-00	BAG, POLYETHYLENE	
4-341-944-00	BAG, PROTECTION	
4-357-130-00	CUSHION (LOWER) (ASSY)	
4-357-131-00	CUSHION (RIGHT) (ASSY)	
4-358-203-00	INDIVIDUAL CARTON	
4-357-133-00	CUSHION (LOWER FRONT)	
4-357-134-00	CUSHION (LOWER REAR)	
4-357-135-00	CUSHION (UPPER FRONT)	
4-357-136-00	CUSHION (UPPER REAR)	
4-493-668-11	MANUAL, INSTRUCTION	

NOTE:

The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

• =>: Due to standardization, interchangeable replacements may be substituted for parts specified in the diagrams.

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• All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

CAPACITORS
• MF : μ F, PF : μ F

RESISTORS
• All resistors are in ohms
• F : nonflammable

COILS
• MMH : mH, UH : μ H

STANDARD PARTS LIST

ELECTROLYTIC CAPACITORS

RATING → : Use the high voltage rated one.							
CAP. (μF)	6.3 VOLT.	10 VOLT.	16 VOLT.	25 VOLT.	35 VOLT.	50 VOLT.	63 VOLT.
	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.	PART No.
0.47						→	→
1.0						→	→
2.2						→	→
3.3						→	→
4.7				→	→	→	1-123-369-00
10			→	→	→	1-123-356-00	1-123-370-00
22			→	1-123-330-00	→	1-123-357-00	1-123-371-00
33	→	→	1-123-318-00	→	1-123-343-00	→	1-123-372-00
47	→	1-123-306-00	→	1-123-332-00	→	1-123-359-00	1-123-373-00
100	→	1-123-307-00	→	1-123-333-00	1-123-345-00	1-123-360-00	1-123-374-00
220	→	1-123-308-00	1-123-321-00	1-123-334-00	1-123-346-00	1-123-361-00	1-123-375-00
330	→	1-123-309-00	1-123-322-00	1-123-335-00	1-123-347-00	1-123-362-00	1-123-376-00
470	1-123-298-00	1-123-310-00	1-123-323-00	1-123-336-00	1-123-348-00	1-123-363-00	1-123-377-00
1000	1-123-299-00	1-123-311-00	1-123-324-00	1-123-337-00	1-123-349-00	1-123-364-00	1-123-378-00
2200	1-123-300-00	→	1-123-325-00	1-123-338-00	1-123-350-00		
3300	1-123-301-00	1-123-313-00	1-123-326-00	1-123-339-00			
4700	1-123-302-00	1-123-314-00	1-123-327-00				
6800	1-123-303-00	1-123-315-00					
10000	1-123-304-00						

CAP. (μF)	100 VOLT.	160 VOLT.	250 VOLT.	350 VOLT.
	PART No.	PART No.	PART No.	PART No.
0.47	1-123-379-00			
1.0	1-123-380-00	1-123-252-00	1-123-003-00	1-121-168-00
2.2	1-123-381-00	1-123-026-00	1-123-027-00	1-123-028-00
3.3	1-123-382-00	1-121-707-00	1-123-004-00	1-123-006-00
4.7	1-123-383-00	1-121-246-00	1-121-759-00	1-123-007-00
10	1-123-384-00	1-121-999-00	1-123-254-00	1-123-008-00
22	1-123-385-00	1-123-253-00	1-123-005-00	1-123-022-00
33	1-123-386-00	1-121-757-00		
47	1-123-387-00	1-121-919-00		
100	1-123-388-00			
220	1-123-389-00			
330	1-123-390-00			
470	1-123-391-00			

CERAMIC CAPACITORS

RATING							
CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (pF)	50 VOLT.	CAP. (μF)	50 VOLT.
	PART No.		PART No.		PART No.		PART No.
0.5	1-101-837-00	22	1-102-959-00	150	1-101-361-00	0.001	1-102-074-00
0.75	1-101-586-00	24	1-102-960-00	160	1-101-367-00	0.0012	1-102-118-00
1.0	1-102-934-00	27	1-102-961-00	180	1-102-976-00	0.0015	1-102-119-00
1.5	1-101-576-00	30	1-102-962-00	200	1-102-977-00	0.0018	1-102-120-00
2.0	1-102-935-00	33	1-102-963-00	220	1-102-978-00	0.0022	1-102-121-00
3	1-102-936-00	36	1-102-964-00	240	1-102-979-00	0.0027	1-102-122-00
4	1-102-937-00	39	1-102-965-00	270	1-102-980-00	0.0033	1-102-123-00
5	1-102-942-00	43	1-102-966-00	300	1-102-981-00	0.0039	1-102-124-00
6	1-102-943-00	47	1-101-880-00	330	1-102-820-00	0.0047	1-102-125-00
7	1-102-944-00	51	1-101-882-00	360	1-102-821-00	0.0056	1-102-126-00
8	1-102-945-00	56	1-101-884-00	390	1-102-822-00	0.0068	1-102-127-00
9	1-102-946-00	62	1-101-886-00	430	1-102-823-00	0.0082	1-102-128-00
10	1-102-947-00	68	1-101-888-00	470	1-102-824-00	0.01	1-102-129-00
11	1-102-948-00	75	1-101-890-00	510	1-101-059-00	0.022	1-101-005-00
12	1-102-949-00	82	1-102-971-00	560	1-102-115-00	0.047	1-101-006-00
13	1-102-950-00	91	1-102-972-00	680	1-102-116-00		
15	1-102-951-00	100	1-102-973-00	820	1-102-117-00		
16	1-102-952-00	110	1-102-815-00				
18	1-102-953-00	120	1-102-816-00				
20	1-102-958-00	130	1-101-081-00				

0.001μF = 1,000pF

MYLAR CAPACITORS

RATING											
CAP. (μF)	50 VOLT.	100 VOLT.	200 VOLT.	CAP. (μF)	50 VOLT.	100 VOLT.	200 VOLT.	CAP. (μF)	50 VOLT.	100 VOLT.	200 VOLT.
	PART No.	PART No.	PART No.		PART No.	PART No.	PART No.		PART No.	PART No.	PART No.
0.001	1-108-227-00	1-108-365-00	1-108-409-00	0.01	1-108-239-00	1-108-377-00	1-108-421-00	0.1	1-108-251-00	1-108-389-00	1-108-433-00
0.0012	1-108-351-00	1-108-366-00	1-108-410-00	0.012	1-108-357-00	1-108-378-00	1-108-422-00	0.12	1-108-363-00	1-108-390-00	1-108-434-00
0.0015	1-108-228-00	1-108-367-00	1-108-411-00	0.015	1-108-240-00	1-108-379-00	1-108-423-00	0.15	1-108-252-00	1-108-391-00	1-108-435-00
0.0018	1-108-352-00	1-108-368-00	1-108-412-00	0.018	1-108-358-00	1-108-380-00	1-108-424-00	0.18	1-108-364-00	1-108-392-00	1-108-436-00
0.0022	1-108-230-00	1-108-369-00	1-108-413-00	0.022	1-108-242-00	1-108-381-00	1-108-425-00	0.22	1-108-254-00	1-108-393-00	1-108-437-00
0.0027	1-108-353-00	1-108-370-00	1-108-414-00	0.027	1-108-359-00	1-108-382-00	1-108-426-00	0.27	1-108-854-00		
0.0033	1-108-232-00	1-108-371-00	1-108-415-00	0.033	1-108-244-00	1-108-383-00	1-108-427-00	0.33	1-108-855-00		
0.0039	1-108-354-00	1-108-372-00	1-108-416-00	0.039	1-108-360-00	1-108-384-00	1-108-428-00	0.39	1-108-856-00		
0.0047	1-108-234-00	1-108-373-00	1-108-417-00	0.047	1-108-246-00	1-108-385-00	1-108-429-00	0.47	1-108-857-00		
0.0056	1-108-355-00	1-108-374-00	1-108-418-00	0.056	1-108-361-00	1-108-386-00	1-108-430-00				
0.0068	1-108-237-00	1-108-375-00	1-108-419-00	0.068	1-108-249-00	1-108-387-00	1-108-431-00				
0.0082	1-108-356-00	1-108-376-00	1-108-420-00	0.082	1-108-362-00	1-108-388-00	1-108-432-00				

1/4 WATT CARBON RESISTORS

Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.	Ω	Part No.
1.0	1-246-401-00	10	1-246-425-00	100	1-246-449-00	1.0k	1-246-473-00	10k	1-246-497-00	100k	1-246-521-00	1.0M	1-246-545-00
1.1	1-246-402-00	11	1-246-426-00	110	1-246-450-00	1.1k	1-246-474-00	11k	1-246-498-00	110k	1-246-522-00	1.1M	1-210-814-00
1.2	1-246-403-00	12	1-246-427-00	120	1-246-451-00	1.2k	1-246-475-00	12k	1-246-499-00	120k	1-246-523-00	1.2M	1-210-815-00
1.3	1-246-404-00	13	1-246-428-00	130	1-246-452-00	1.3k	1-246-476-00	13k	1-246-500-00	130k	1-246-524-00	1.3M	1-210-816-00
1.5	1-246-405-00	15	1-246-429-00	150	1-246-453-00	1.5k	1-246-477-00	15k	1-246-501-00	150k	1-246-525-00	1.5M	1-210-817-00
1.6	1-246-406-00	16	1-246-430-00	160	1-246-454-00	1.6k	1-246-478-00	16k	1-246-502-00	160k	1-246-526-00	1.6M	1-210-818-00
1.8	1-246-407-00	18	1-246-431-00	180	1-246-455-00	1.8k	1-246-479-00	18k	1-246-503-00	180k	1-246-527-00	1.8M	1-210-819-00
2.0	1-246-408-00	20	1-246-432-00	200	1-246-456-00	2.0k	1-246-480-00	20k	1-246-504-00	200k	1-246-528-00	2.0M	1-210-820-00
2.2	1-246-409-00	22	1-246-433-00	220	1-246-457-00	2.2k	1-246-481-00	22k	1-246-505-00	220k	1-246-529-00	2.2M	1-210-821-00
2.4	1-246-410-00	24	1-246-434-00	240	1-246-458-00	2.4k	1-246-482-00	24k	1-246-506-00	240k	1-246-530-00	2.4M	1-244-754-00
2.7	1-246-411-00	27	1-246-435-00	270	1-246-459-00	2.7k	1-246-483-00	27k	1-246-507-00	270k	1-246-531-00	2.7M	1-244-755-00
3.0	1-246-412-00	30	1-246-436-00	300	1-246-460-00	3.0k	1-246-484-00	30k	1-246-508-00	300k	1-246-532-00	3.0M	1-244-756-00
3.3	1-246-413-00	33	1-246-437-00	330	1-246-461-00	3.3k	1-246-485-00	33k	1-246-509-00	330k	1-246-533-00	3.3M	1-244-757-00
3.6	1-246-414-00	36	1-246-438-00	360	1-246-462-00	3.6k	1-246-486-00	36k	1-246-510-00	360k	1-246-534-00	3.6M	1-244-758-00
3.9	1-246-415-00	39	1-246-439-00	390	1-246-463-00	3.9k	1-246-487-00	39k	1-246-511-00	390k	1-246-535-00	3.9M	1-244-759-00
4.3	1-246-416-00	43	1-246-440-00	430	1-246-464-00	4.3k	1-246-488-00	43k	1-246-512-00	430k	1-246-536-00	4.3M	1-244-760-00
4.7	1-246-417-00	47	1-246-441-00	470	1-246-465-00	4.7k	1-246-489-00	47k	1-246-513-00	470k	1-246-537-00	4.7M	1-244-761-00
5.1	1-246-418-00	51	1-246-442-00	510	1-246-466-00	5.1k	1-246-490-00	51k	1-246-514-00	510k	1-246-538-00	5.1M	1-244-762-00
5.6	1-246-419-00	56	1-246-443-00	560	1-246-467-00	5.6k	1-246-491-00	56k	1-246-515-00	560k	1-246-539-00		
6.2	1-246-420-00	62	1-246-444-00	620	1-246-468-00	6.2k	1-246-492-00	62k	1-246-516-00	620k	1-246-540-00		
6.8	1-246-421-00	68	1-246-445-00	680	1-246-469-00	6.8k	1-246-493-00	68k	1-246-517-00	680k	1-246-541-00		
7.5	1-246-422-00	75	1-246-446-00	750	1-246-470-00	7.5k	1-246-494-00	75k	1-246-518-00	750k	1-246-542-00		
8.2	1-246-423-00	82	1-246-447-00	820	1-246-471-00	8.2k	1-246-495-00	82k	1-246-519-00	820k	1-246-543-00		
9.1	1-246-424-00	91	1-246-448-00	910	1-246-472-00	9.1k	1-246-496-00	91k	1-246-520-00	910k	1-246-544-00		

HARDWARE NOMENCLATURE

Screw:

P 3 x 10

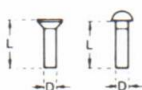
L: Length in mm

D: Diameter in mm

Type of head

Indicated slotted-head only.

Unless otherwise indicated, it means cross-recessed head (Phillips type).



Nut, Washer, Retaining ring:

N 3

Diameter of usable screw or shaft

Reference designation

Reference Designation	Shape	Description	Remarks
SCREWS			
P		pan-head screw	binding-head (B) screw for replacement
PWH		pan-head screw with washer face	binding-head (B) screw and flat washer for replacement
PS PSP		pan-head screw with spring washer	binding-head (B) screw and spring washer for replacement
PSW PSPW		pan-head screw with spring and flat washers	binding-head (B) screw and spring and flat washers for replacement
R		round-head screw	binding-head (B) screw for replacement
K		flat-countersunk-head screw	
RK		oval-countersunk-head screw	
B		binding-head screw	
T		truss-head screw	binding-head (B) screw for replacement
F		flat-fillister-head screw	
RF		fillister-head screw	
BV		brazier-head screw	

Reference Designation	Shape	Description	Remarks
SELF-TAPPING SCREWS			
TA		self-tapping screw	ex: TA, P 3 x 10
PTP		pan-head self-tapping screw	binding-head self-tapping (TA, B) screw for replacement
PTPWH		pan-head self-tapping screw with washer face	binding-head self-tapping (TA, B) screw and flat washer for replacement
PTTWH		pan-head thread-rolling screw with washer face	binding-head (B) screw and flat washer for replacement
SET SCREWS			
SC		set screw	
SC		hexagon-socket set screw	ex: SC 2.6 x 4, hexagon socket
NUT			
N		nut	
WASHERS			
W		flat washer	
SW		spring washer	
LW		internal-tooth lock washer	ex: LW3, internal
LW		external-tooth lock washer	ex: LW3, external
RETAINING RINGS			
E		retaining ring	
G		grip-type retaining ring	

Sony Corporation
TV & Camera Group

9-962-923-01

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82B0987-1
Printed in Japan

KX-20PS1

SONY[®] SERVICE MANUAL

SUPPLEMENT-2

AEP Model

Chassis No. SCC-405A-A
Serial No. 200001 and later
EXCEPT Serial No. 300001 and later

UK Model

Chassis No. SCC-404A-A
Serial No. 240001 and later

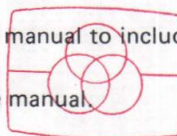
AUS Model

Chassis No. SCC-428A-A
Serial No. 270001 and later

Subject: CHANGE OF PICTURE TUBE and T BOARD

June, 1984

This supplement updates the service manual to include production change.
File this supplement with the service manual.



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2. ELECTRICAL PARTS LIST	12

Note: This supplement includes the schematic diagram, T printed wiring board, parts list of T board and changed information.
Refer to the Service Manual for other information.



Model AEP

Chassis No. SCC-405A-A
Serial No. 300001 and later
EXCEPT Series No. 300001 and later

Model UK

Chassis No. SCC-405A-A
Serial No. 300001 and later

Model AUS

Chassis No. SCC-405A-A
Serial No. 300001 and later

June 1984

SUPPLEMENT-2


This supplement contains the necessary information to replace the components identified by shading and mark  on the schematic diagrams, exploded views and in the parts list. It is not a replacement for the main manual.

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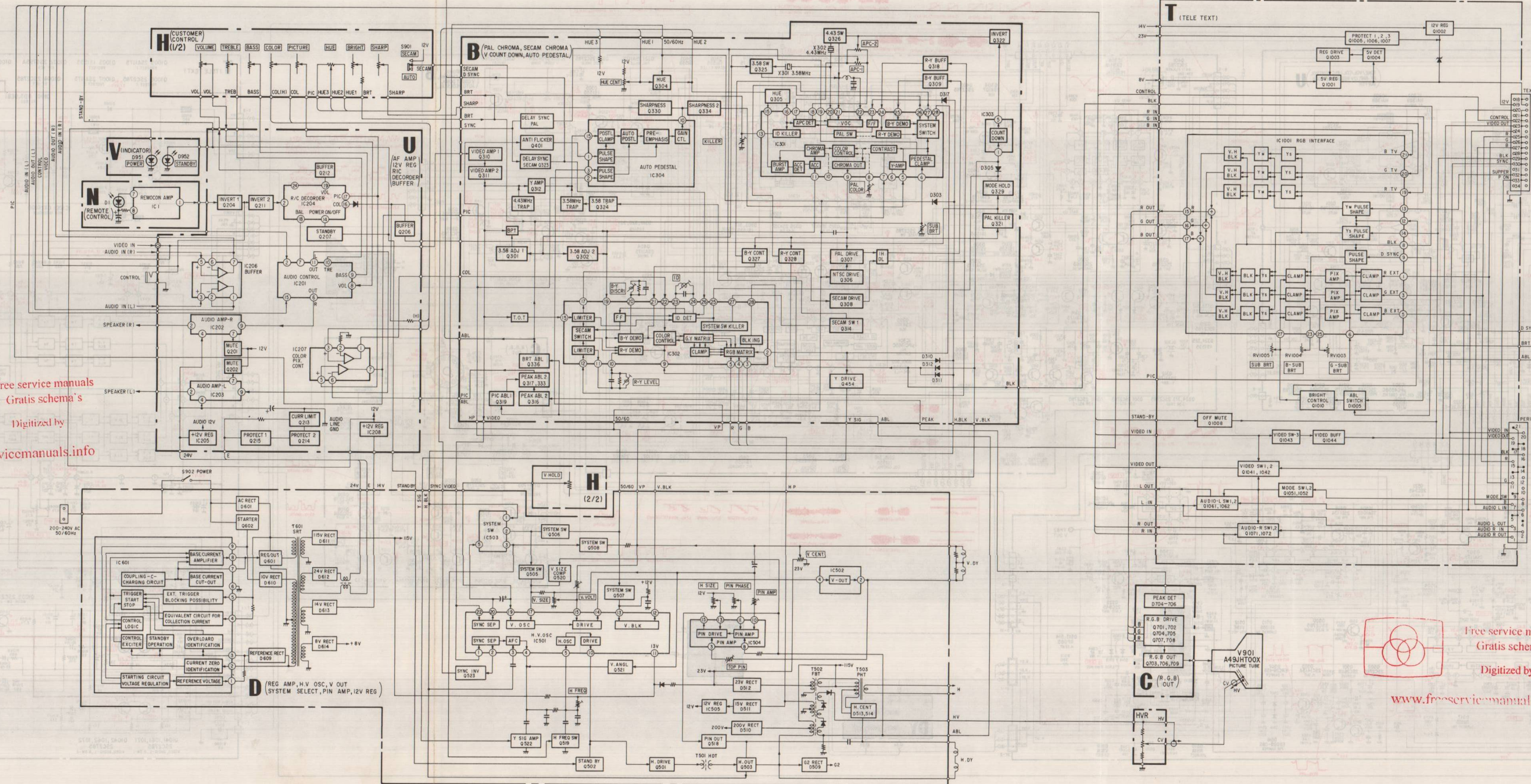
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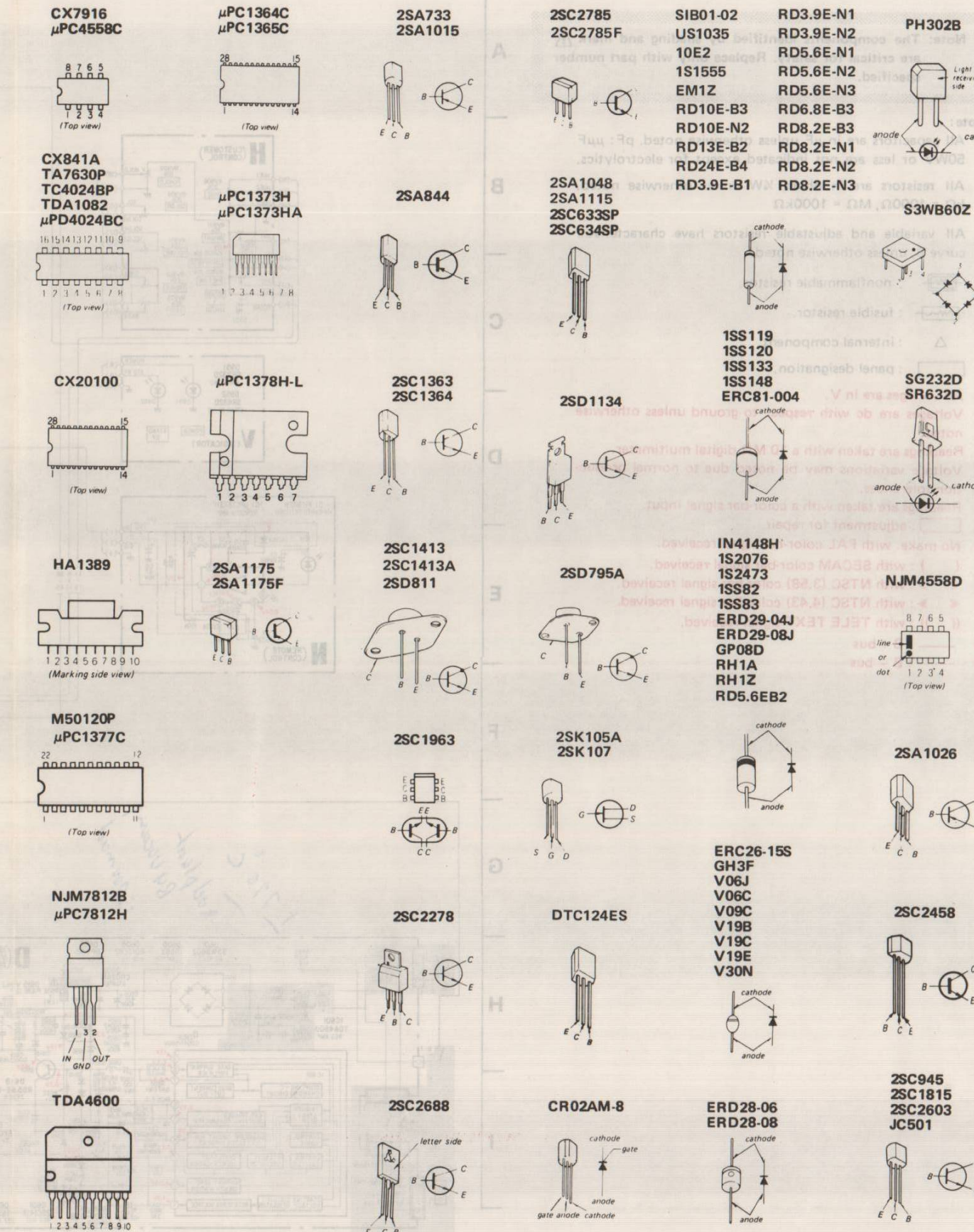
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.


1-1. BLOCK DIAGRAM







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




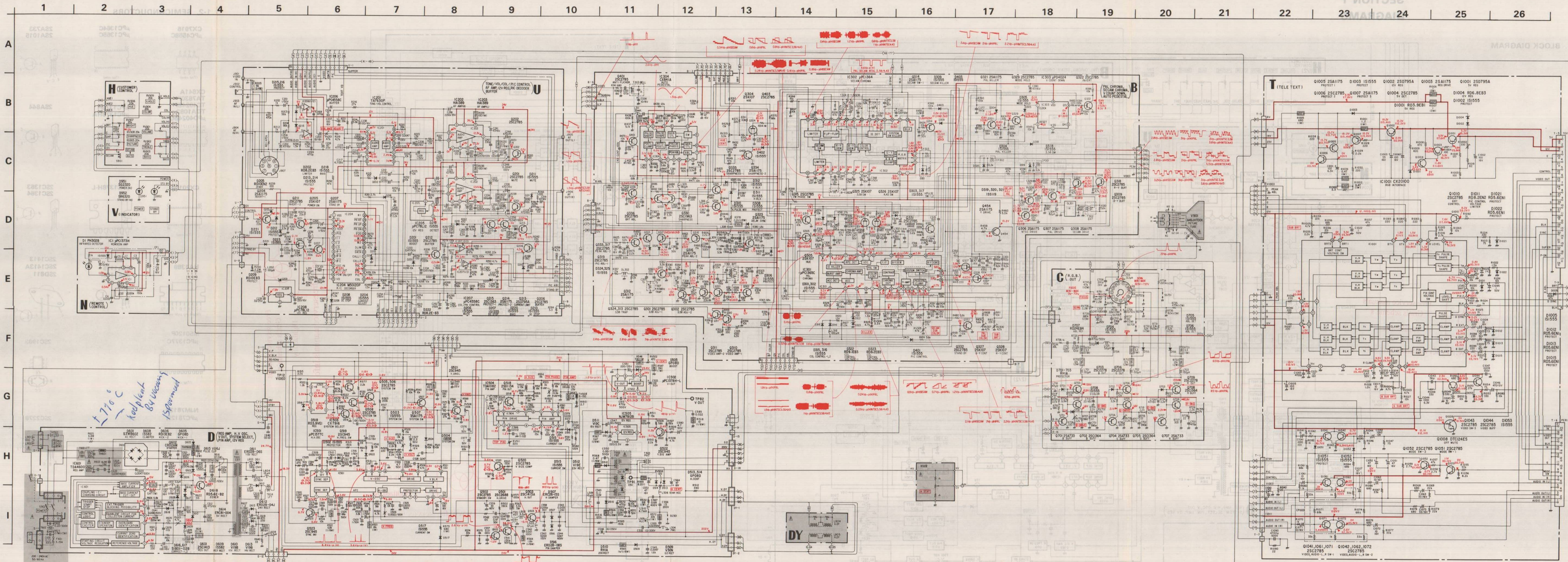
1-3. SCHEMATIC DIAGRAM

Note: The components identified by shading and mark  are critical for safety. Replace only with part number specified.

Note:

- All capacitors are in μF unless otherwise noted, pF : μF 50WV or less are not indicated except for electrolytics.
- All resistors are in ohms, $\text{k}\Omega$ unless otherwise noted, $\text{k}\Omega = 1000\Omega$, $\text{M}\Omega = 1000\text{k}\Omega$
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
-  : nonflammable resistor.
-  : fusible resistor.
-  : internal component.
-  : panel designation.

- All voltages are in V.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken with a 10 $\text{M}\Omega$ digital multimeter.
- Voltage variations may be noted due to normal production tolerances.
- Readings are taken with a color-bar signal input.
-  : adjustment for repair.
- No make: with PAL color-bar signal received.
-  : with SECAM color-bar signal received.
-  : with NTSC (3.58) color-bar signal received.
-  : with NTSC (4.43) color-bar signal received.
-  : with TELE TEXT signal received.
-  : B + bus
-  : B - bus



T [TELE TEXT]

1

2

3

4

5

6

7

A

B

D

E

F

G

H

1

T

SECTION 2

ELECTRICAL PARTS LIST

NOTE:

The components identified by shading and mark **A** are critical for safety. Replace only with part number specified.

- Items marked " **A** " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

RESISTORS

- All resistors are in ohms
- F : nonflammable

COILS

- MMH : mH, UH : μ H

CAPACITORS

- MF : μ F, PF : μ F

- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

When indicating parts by reference number, please include the board name.

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
	▲:A-1327-003-A	T BOARD, COMPLETE *****		D1022	8-719-102-71	DIODE RD5.6E-N2	
	▲:4-348-704-00	HEAT SINK (A)		D1051	8-719-911-19	DIODE 1SS119	
<u>CAPACITOR</u>				D1052	8-719-911-19	DIODE 1SS119	
C1001	1-123-307-00	ELECT	100MF 20% 6.3V	D1053	8-719-911-19	DIODE 1SS119	
C1002	1-123-333-00	ELECT	100MF 20% 16V	<u>IC</u>			
C1003	1-123-318-00	ELECT	33MF 20% 16V	IC1001	8-752-010-00	IC CX20100	
C1004	1-123-356-00	ELECT	10MF 20% 16V	<u>TRANSISTOR</u>			
C1005	1-123-320-00	ELECT	100MF 20% 16V	Q1001	8-729-109-53	TRANSISTOR 2SD795A	
C1006	1-123-333-00	ELECT	100MF 20% 16V	Q1002	8-729-109-53	TRANSISTOR 2SD795A	
C1007	1-123-332-00	ELECT	47MF 20% 16V	Q1003	8-729-204-83	TRANSISTOR 2SA1048GR	
C1009	1-123-356-00	ELECT	10MF 20% 16V	Q1004	8-729-245-83	TRANSISTOR 2SC2458	
C1010	1-123-380-00	ELECT	1MF 20% 50V	Q1005	8-729-204-83	TRANSISTOR 2SA1048GR	
C1011	1-123-356-00	ELECT	10MF 20% 16V	Q1006	8-729-245-83	TRANSISTOR 2SC2458	
C1012	1-123-379-00	ELECT	0.47MF 20% 50V	Q1007	8-729-204-83	TRANSISTOR 2SA1048GR	
C1013	1-123-379-00	ELECT	0.47MF 20% 50V	Q1010	8-729-245-83	TRANSISTOR 2SC2458	
C1014	1-123-379-00	ELECT	0.47MF 20% 50V	Q1041	8-729-245-83	TRANSISTOR 2SC2458	
C1021	1-123-328-00	ELECT	4.7MF 20% 25V	Q1042	8-729-245-83	TRANSISTOR 2SC2458	
C1022	1-123-380-00	ELECT	1MF 20% 50V	Q1043	8-729-245-83	TRANSISTOR 2SC2458	
C1023	1-123-316-00	ELECT	10MF 20% 16V	Q1044	8-729-245-83	TRANSISTOR 2SC2458	
C1031	1-123-330-00	ELECT	22MF 20% 16V	Q1051	8-729-245-83	TRANSISTOR 2SC2458	
C1041	1-123-311-00	ELECT	1000MF 20% 10V	Q1052	8-729-245-83	TRANSISTOR 2SC2458	
C1042	1-123-311-00	ELECT	1000MF 20% 10V	Q1061	8-729-245-83	TRANSISTOR 2SC2458	
C1043	1-161-268-00	CERAMIC	56PF 5% 50V	Q1062	8-729-245-83	TRANSISTOR 2SC2458	
C1044	1-123-299-00	ELECT	1000MF 20% 6.3V	Q1071	8-729-245-83	TRANSISTOR 2SC2458	
C1045	1-123-356-00	ELECT	10MF 20% 16V	Q1072	8-729-245-83	TRANSISTOR 2SC2458	
C1046	1-123-310-00	ELECT	470MF 20% 10V	<u>RESISTOR</u>			
C1047	1-106-210-00	MYLAR	0.039MF 10% 100V	R1001	1-212-361-00	METAL OXIDE 1.2 5% 1W F	
C1051	1-123-332-00	ELECT	47MF 20% 16V	R1002	1-212-356-00	METAL OXIDE 0.47 5% 1W F	
C1052	1-123-332-00	ELECT	47MF 20% 16V	R1003	1-247-107-00	CARBON 100 5% 1/4W	
C1061	1-123-356-00	ELECT	10MF 20% 16V	R1004	1-247-107-00	CARBON 100 5% 1/4W	
C1062	1-123-356-00	ELECT	10MF 20% 16V	R1005	1-213-141-00	METAL OXIDE 680 5% 1W F	
C1063	1-123-318-00	ELECT	33MF 20% 16V	R1006	1-206-487-00	METAL OXIDE 1 5% 3W F	
C1071	1-123-356-00	ELECT	10MF 20% 16V	R1007	1-206-487-00	METAL OXIDE 1 5% 3W F	
C1072	1-123-356-00	ELECT	10MF 20% 16V	R1008	1-246-465-00	CARBON 470 5% 1/4W	
C1073	1-123-318-00	ELECT	33MF 20% 16V	R1009	1-247-129-00	CARBON 820 5% 1/4W	
C1083	1-102-125-00	CERAMIC	0.0047MF 10% 50V	R1010	1-247-104-00	CARBON 75 5% 1/4W	
C1090	1-102-085-00	CERAMIC	0.0047MF 500V	R1011	1-247-104-00	CARBON 75 5% 1/4W	
C1095	1-123-380-00	ELECT	1MF 20% 50V	R1012	1-247-104-00	CARBON 75 5% 1/4W	
<u>DIODE</u>				R1013	1-247-104-00	CARBON 75 5% 1/4W	
D1001	8-719-100-20	DIODE RD3.9E-B1		R1014	1-246-457-00	CARBON 220 5% 1/4W	
D1002	8-719-911-19	DIODE 1SS119		R1015	1-246-505-00	CARBON 22K 5% 1/4W	
D1003	8-719-911-19	DIODE 1SS119		R1016	1-247-141-00	CARBON 2.7K 5% 1/4W	
D1004	8-719-100-42	DIODE RD6.8E-B3		R1017	1-247-155-00	CARBON 10K 5% 1/4W	
D1005	8-719-911-19	DIODE 1SS119		R1018	1-247-109-00	CARBON 120 5% 1/4W	
D1011	8-719-102-84	DIODE RD8.2E-N2		R1019	1-247-105-00	CARBON 82 5% 1/4W	
D1012	8-719-102-71	DIODE RD5.6E-N2		R1020	1-247-155-00	CARBON 10K 5% 1/4W	
D1013	8-719-102-71	DIODE RD5.6E-N2		R1021	1-247-155-00	CARBON 10K 5% 1/4W	
D1015	8-719-102-71	DIODE RD5.6E-N2		R1022	1-246-477-00	CARBON 1.5K 5% 1/4W	
D1021	8-719-102-71	DIODE RD5.6E-N2		R1023	1-246-473-00	CARBON 1K 5% 1/4W	
				R1024	1-246-473-00	CARBON 1K 5% 1/4W	

T

Ref.No.	Part No.	Description	Remark
R1025	1-246-473-00	CARBON	1K 5% 1/4W
R1026	1-247-133-00	CARBON	1.2K 5% 1/4W
R1027	1-246-499-00	CARBON	12K 5% 1/4W
R1028	1-246-457-00	CARBON	220 5% 1/4W
R1029	1-246-481-00	CARBON	2.2K 5% 1/4W
R1030	1-246-457-00	CARBON	220 5% 1/4W
R1034	1-246-505-00	CARBON	22K 5% 1/4W
R1035	1-246-481-00	CARBON	2.2K 5% 1/4W
R1036	1-246-517-00	CARBON	68K 5% 1/4W
R1037	1-246-513-00	CARBON	47K 5% 1/4W
R1038	1-246-457-00	CARBON	220 5% 1/4W
R1039	1-212-356-00	METAL OXIDE	0.47 5% 1W F
R1040	1-247-109-00	CARBON	120 5% 1/4W
R1041	1-246-473-00	CARBON	1K 5% 1/4W
R1042	1-246-473-00	CARBON	1K 5% 1/4W
R1043	1-246-473-00	CARBON	1K 5% 1/4W
R1044	1-246-473-00	CARBON	1K 5% 1/4W
R1045	1-246-473-00	CARBON	1K 5% 1/4W
R1046	1-246-473-00	CARBON	1K 5% 1/4W
R1047	1-247-104-00	CARBON	75 5% 1/4W
R1048	1-247-119-00	CARBON	330 5% 1/4W
R1049	1-247-119-00	CARBON	330 5% 1/4W
R1050	1-246-469-00	CARBON	680 5% 1/4W
R1051	1-246-507-00	CARBON	27K 5% 1/4W
R1052	1-247-155-00	CARBON	10K 5% 1/4W
R1053	1-247-119-00	CARBON	330 5% 1/4W
R1054	1-246-446-00	CARBON	75 5% 1/4W
R1055	1-246-509-00	CARBON	33K 5% 1/4W
R1056	1-247-153-00	CARBON	8.2K 5% 1/4W
R1057	1-246-513-00	CARBON	47K 5% 1/4W
R1058	1-247-141-00	CARBON	2.7K 5% 1/4W
R1059	1-247-141-00	CARBON	2.7K 5% 1/4W
R1060	1-246-473-00	CARBON	1K 5% 1/4W
R1061	1-246-517-00	CARBON	68K 5% 1/4W
R1064	1-246-517-00	CARBON	68K 5% 1/4W
R1066	1-246-469-00	CARBON	680 5% 1/4W
R1067	1-246-509-00	CARBON	33K 5% 1/4W
R1068	1-246-469-00	CARBON	680 5% 1/4W
R1069	1-246-505-00	CARBON	22K 5% 1/4W
R1070	1-246-473-00	CARBON	1K 5% 1/4W
R1071	1-246-517-00	CARBON	68K 5% 1/4W
R1074	1-246-517-00	CARBON	68K 5% 1/4W
R1076	1-246-469-00	CARBON	680 5% 1/4W
R1077	1-246-509-00	CARBON	33K 5% 1/4W
R1078	1-246-469-00	CARBON	680 5% 1/4W
R1079	1-246-505-00	CARBON	22K 5% 1/4W
R1080	1-247-155-00	CARBON	10K 5% 1/4W
R1081	1-246-457-00	CARBON	220 5% 1/4W
R1082	1-246-473-00	CARBON	1K 5% 1/4W
R1083	1-246-457-00	CARBON	220 5% 1/4W
R1084	1-246-457-00	CARBON	220 5% 1/4W

Ref.No.	Part No.	Description	Remark
R1085	1-246-457-00	CARBON	220 5% 1/4W
R1086	1-247-155-00	CARBON	10K 5% 1/4W
R1087	1-246-513-00	CARBON	47K 5% 1/4W
R1088	1-247-077-00	CARBON	3.3 5% 1/4W
R1090	1-247-091-00	CARBON	22 5% 1/4W
R1091	1-247-155-00	CARBON	10K 5% 1/4W
R1092	1-246-473-00	CARBON	1K 5% 1/4W
R1093	1-247-155-00	CARBON	10K 5% 1/4W
R1095	1-246-457-00	CARBON	220 5% 1/4W
R1096	1-246-457-00	CARBON	220 5% 1/4W
R1097	1-246-457-00	CARBON	220 5% 1/4W
R1098	1-246-457-00	CARBON	220 5% 1/4W
R1099	1-246-457-00	CARBON	220 5% 1/4W

VARIABLE RESISTOR

RV1002	1-228-718-00	RES, ADJ, CERAMIC CARBON 330
RV1003	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K
RV1004	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K
RV1005	1-228-723-00	RES, ADJ, CERAMIC CARBON 4.7K

CONNECTOR

T1	▲:1-560-156-00	PLUG, CONNECTOR (2.5MM PITCH)
T2	▲:1-560-127-00	PLUG, CONNECTOR (2.5MM) 7P
T3	▲:1-508-766-00	4P PLUG (M)
T4	▲:1-560-126-00	PLUG, CONNECTOR (2.5MM) 6P
T5	▲:1-560-686-00	CONNECTOR (PLUG) 34P
T6	▲:1-561-534-00	SOCKET 21P
T7	▲:1-508-784-00	1P PLUG
T9	▲:1-560-124-00	PLUG, CONNECTOR (2.5MM) 4P

CHANGED PARTS

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
C BOARD			

CAPACITOR			
C701	1-102-822-00	CERAMIC 390PF 5%	50V
C702	1-102-822-00	CERAMIC 390PF 5%	50V
C703	1-102-824-00	CERAMIC 470PF 5%	50V

B BOARD

CAPACITOR

C364	1-161-265-00	CERAMIC 33PF 5%	50V
C367	1-161-271-00	CERAMIC 100PF 5%	50V

DIODE

D403	8-719-815-55	DIODE 1S1555	
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RESISTOR

R488	1-246-483-00	CARBON 2.7K 5%	1/4W
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MISCELLANEOUS

V901	A.8-737-251-05	CRT A49JHT00X	
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EXPLODED VIEWS

(2) BEZEL

<u>No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
60	A.8-737-251-05	CRT A49JHT00X	

The components identified by shading and mark A are critical for safety. Replace only with part number specified.

KX-20PS SERIES

ADJUSTMENT MANUAL



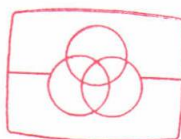
KX-20PS2

HF CHASSIS

April, 1982

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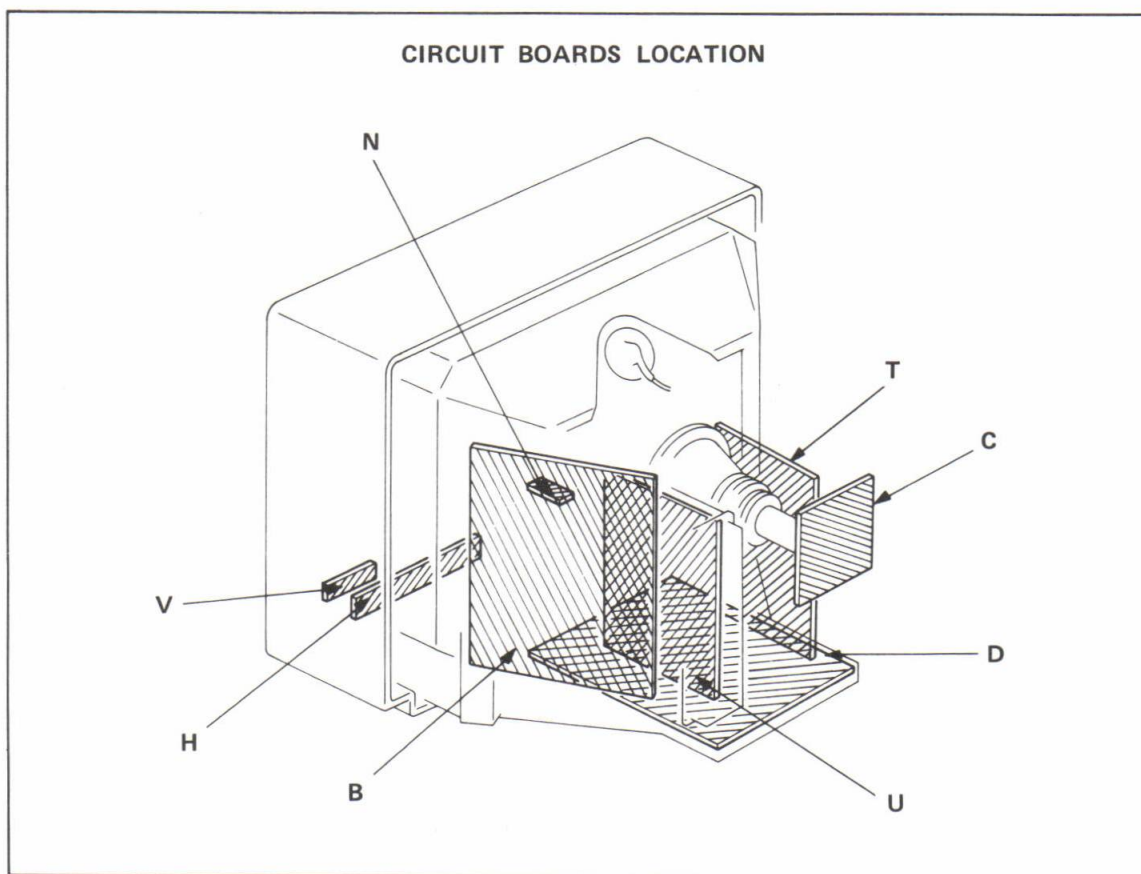
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MON



SECTION 1

SETUP ADJUSTMENTS

- The following adjustments should be made when a complete realignment is required or a new picture tube is installed.
- These adjustments should be performed with rated power supply voltage unless otherwise noted.

Controls and switches should be set as follows unless otherwise noted:

PICTURE controlmaximum
BRIGHT controlmaximum

Perform the adjustments in order as follows:

1. Beam Landing
2. Convergence
3. White Balance

Note: Test Equipment Required.

1. Color-bar/Pattern Generator
2. Degausser

1-1. BEAM LANDING

Preparation:

- Feed in the white pattern.
 - Before starting, degauss the entire screen.
1. Loosen deflection yoke screw.
 2. Adjust purity control as shown in Fig. 1-1.
 3. Slide deflection yoke as far forward as it will go.
 4. (Position neck protector ass'y as shown in Fig. 1-2.)
 5. Disconnect leads **B** and **G** on the C board.
 6. Adjust purity control to center vertical red band as shown in Fig. 1-3.
 7. Slide deflection yoke back for a uniform red screen.
 8. Check green and blue rasters for uniformity by performing the same way as steps 5, 6 and 7.
To get a uniform green screen, connect lead **G** on the C board and disconnect leads **R** and **B**.
To get a uniform blue screen, connect lead **B** on the C board and disconnect leads **R** and **G**.
After these checks, connect the leads **R**, **G** and **B**.
 9. Tighten the deflection yoke screw.
 10. Check if mislanding appears at corners a-d as shown in Fig. 1-4. If mislanding is observed, correct it as shown in Fig. 1-4.
 11. Confirm that beam landing is correct when the receiver is faced in all directions.

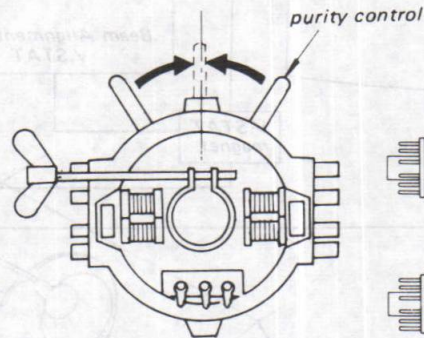


Fig. 1-1.

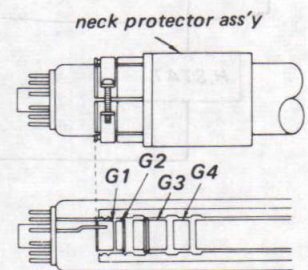


Fig. 1-2.

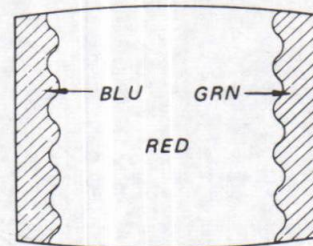
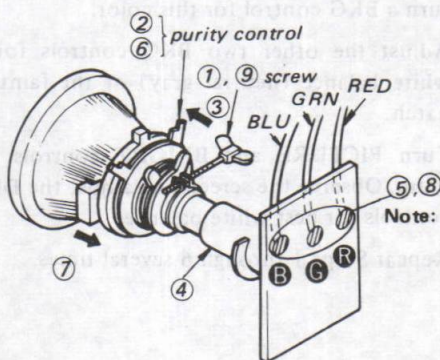
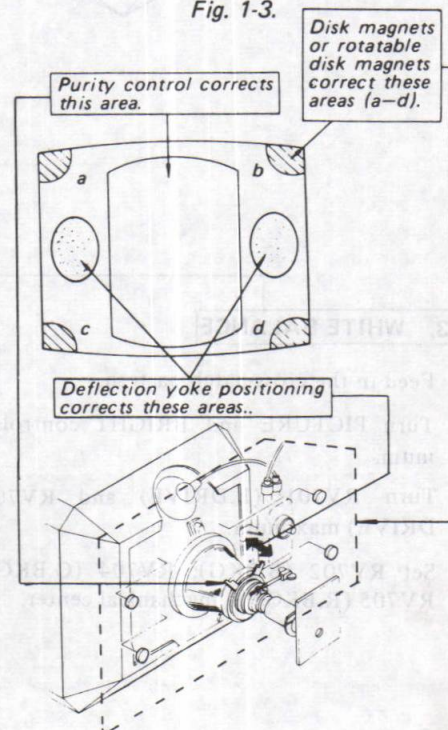


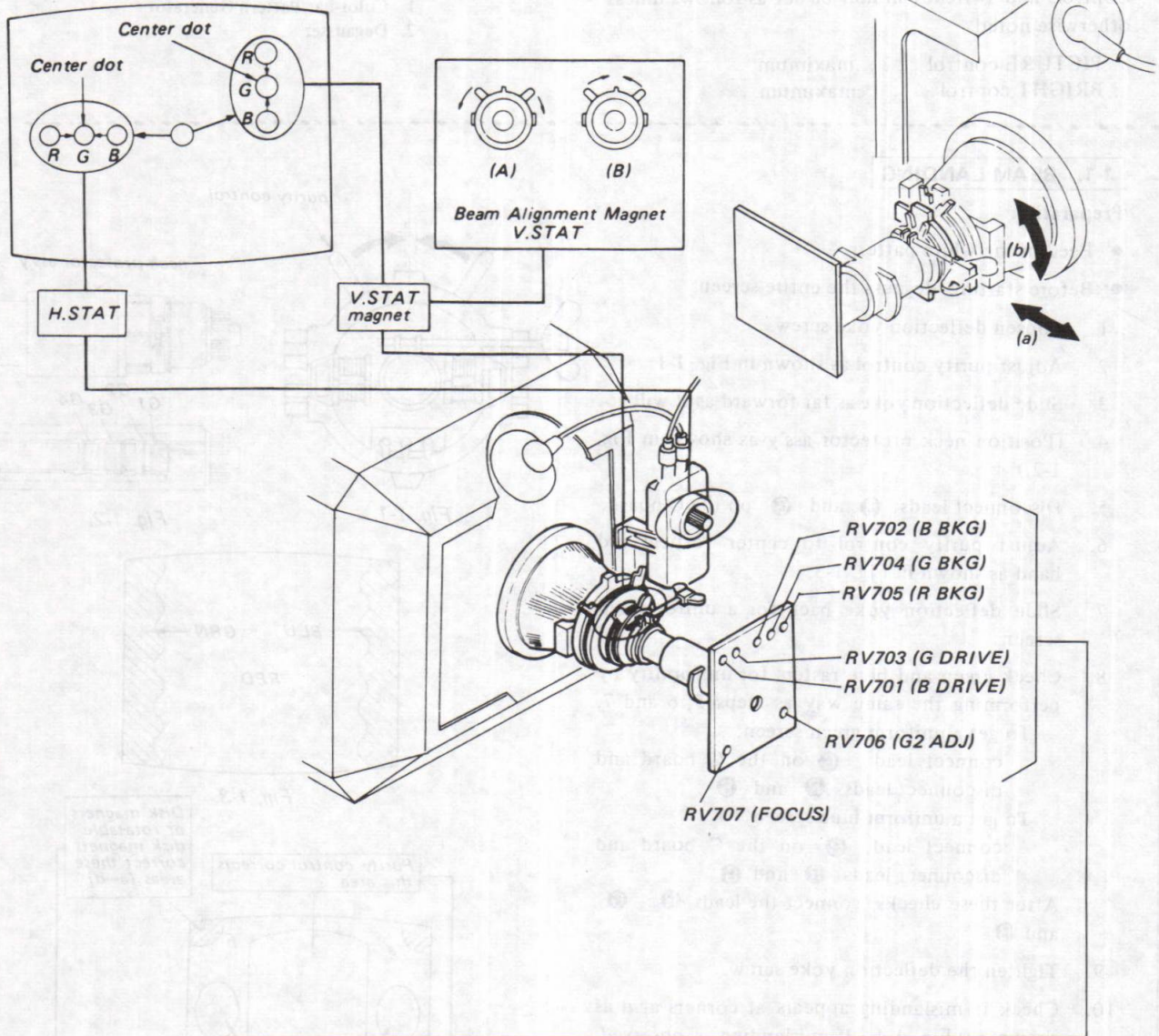
Fig. 1-3.



Note: The circled numbers (1-9) show above steps.

1-2. CONVERGENCE**Preparation:**

- Before starting, perform FOCUS, H.SIZE and V.SIZE adjustments.
- Set BRIGHT control to minimum.
- Feed in the dot pattern.

(1) Horizontal and Vertical Static Convergence

If blue dot does not coincide with red and green dots, perform following steps.

Move BMC magnet (a) to correct insufficient H. static convergence.

Rotate BMC magnet (b) to correct insufficient V. static convergence.

In either case, repeat Beam Landing Adjustment.

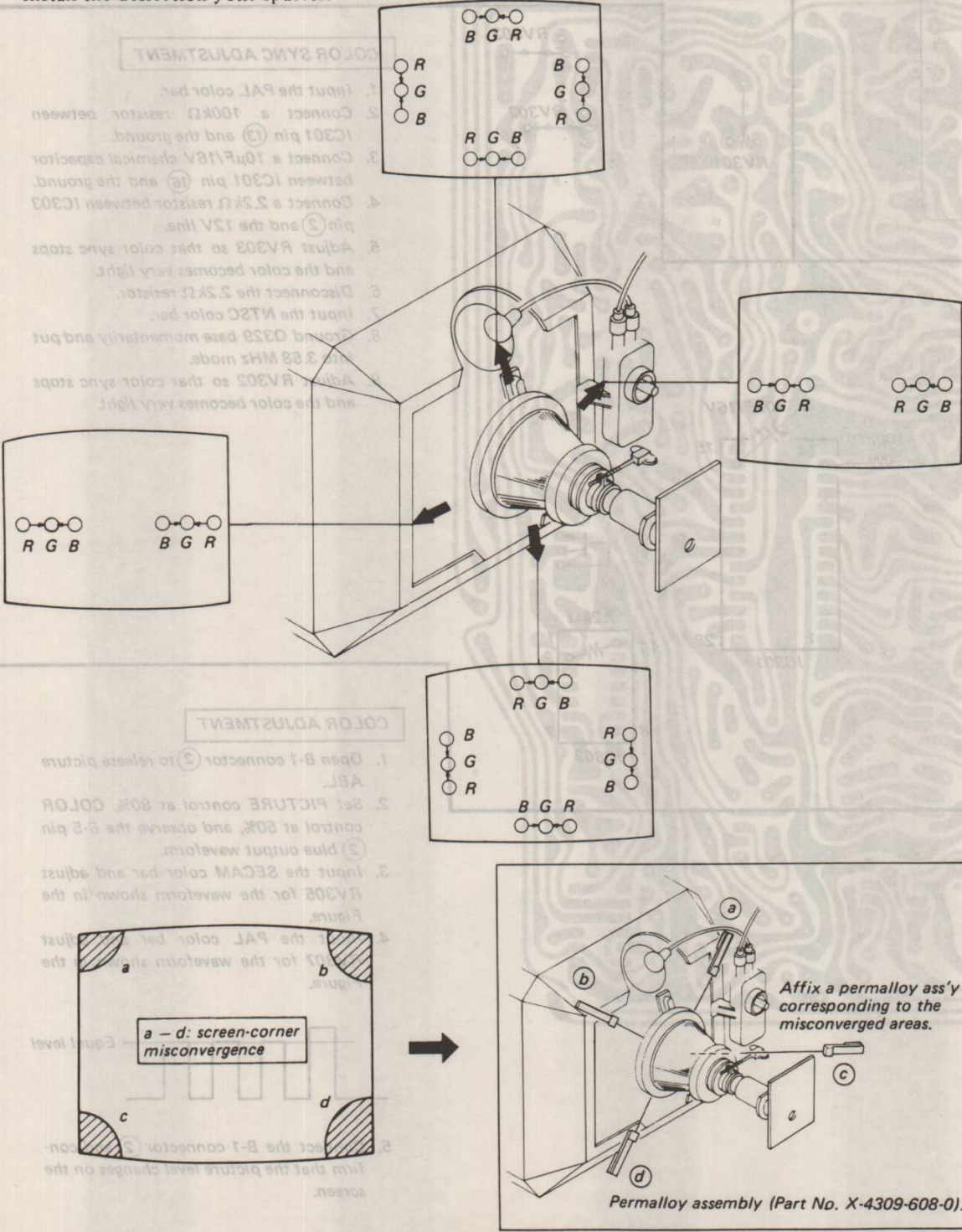
1-3. WHITE BALANCE

Feed in the cross-hatch pattern.

1. Turn PICTURE and BRIGHT controls minimum.
2. Turn RV701 (B.DRIVE) and RV703 (G. DRIVE) maximum.
3. Set RV702 (B.BKG), RV704 (G.BKG), and RV705 (R.BKG) to mechanical center.
4. Turn RV706 (G2 ADJ) slowly to obtain a faintly visible cross-hatch. Note the color that first becomes visible by turning RV706. Do not turn a BKG control for this color.
5. Adjust the other two BKG controls for best white balance (neutral gray) of the faint cross-hatch.
6. Turn PICTURE and BRIGHT controls maximum. Observe the screen and adjust the DRIVE controls for best white balance.
7. Repeat Steps 1 through 6 several times.

Preparation:

- Before starting, perform Horizontal and Vertical Static Convergence Adjustment.
- Loosen deflection yoke screw.
 - Remove deflection yoke spacers.
 - Move the deflection yoke for best convergence as shown below.
 - Tighten the deflection yoke screw.
 - Install the deflection yoke spacers.



SECTION 2
CIRCUIT ADJUSTMENTS

Note: (1) TEST EQUIPMENT REQUIRED

- Oscilloscope
- Digital multimeter
- Color-bar/pattern generator
- Variable auto-transformer
- Isolation transformer
- Regulated-dc power supply
- Frequency counter
- Audio level meter

(2) INPUT SIGNAL

When making these adjustments, supply a color-bar or an off-air signal.

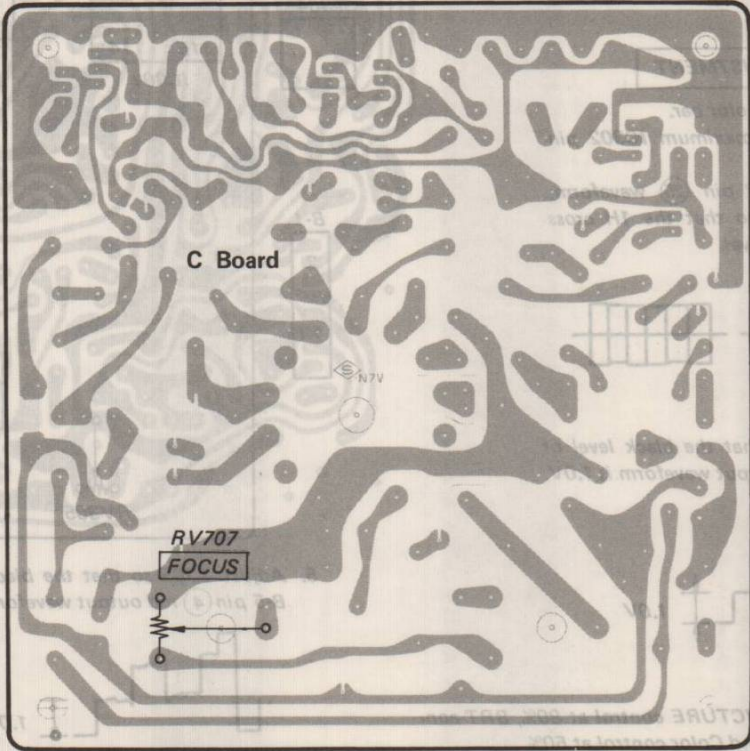
(3) CONTROL SETTINGS

Controls and switches should be set as follows when making checks and adjustments unless otherwise noted.

- PICTURE control
 - BRIGHTNESS control
 - COLOR control
 - V.HOLD control
- Set for best picture
Set for stable picture

2-1. C BOARD ADJUSTMENT

FOCUS Adjust RV707 for best focus.



(4) These adjustments should be performed with the rated power supply voltage unless otherwise noted.

(5) CIRCUIT ADJUSTMENTS

Adjustment	Circuit Board	Page
FOCUS	C	6
H. FREQ.		
PINCUSHION Adjustment		
B+ Adjustment	D	7 - 8
V. SIZE and V. CENT		
H. SIZE and H. CENT		
AF Gain and Balance Adjustment	K	9
HOLD DOWN Adjustment	BA	10

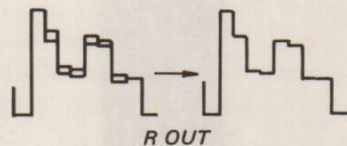
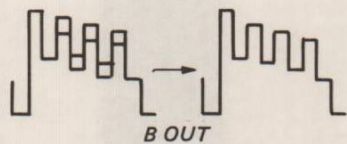
2-2. B BOARD ADJUSTMENT

Y TRAP ADJUSTMENT

1. Input the PAL color bar.
2. Observe the IC304 pin (10) Y signal.
3. Turn the T307 (4.43 MHz TRAP) core and adjust so that the 4.43 MHz carrier element becomes very small.
4. Input the NTSC color bar.
5. Turn the T308 (3.58 MHz TRAP) core and adjust so that the 3.58 MHz carrier element becomes very small.

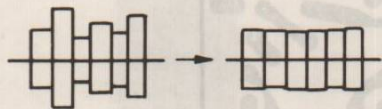
PAL MATRIX ADJUSTMENT

1. Input the PAL color bar.
2. Set the PICTURE control at 80% and BRT control and COLOR control at 50%.
3. Observe the B-5 (2) blue output and (4) red output waveforms while tracking with RV308 (DELAY ADJ) and T302 (DAT), and adjust for the waveforms shown in the figure.

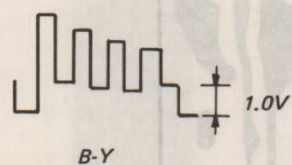


SECAM COLOR ADJUSTMENT

1. Input the SECAM color bar.
2. Adjust T306 for maximum IC302 pin (25) DC level.
3. Observe the IC302 pin (25) waveform, and adjust T303 so that the 1H cross element becomes level.

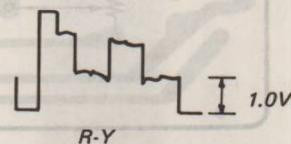


4. Adjust T304 so that the black level of B-5 pin (2) blue output waveform is 1.0V.



Set PICTURE control at 80%, BRT control and Color control at 50%.

5. Adjust T305 so that the black level of B-5 pin (4) red output waveform is 1.0V.



SUB BRT ADJUSTMENT

1. Input the PAL color bar.
2. Set the PICTURE control at minimum.
3. Set the BRT control at center.
4. Adjust RV306 so that the black level of B-5 (2) blue output is 1.0V DC.

Note: The ABL circuit should not operate.

CWPHASE ADJUSTMENT

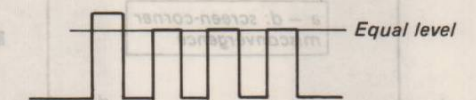
1. Input the SPECIAL color bar.
2. Set the PICTURE control at 80% and BRT control and COLOR control at center.
3. Adjust RV301 so that the color in the ANTI PAL signal segment of the picture almost disappears.
4. Input the NTSC color bar, turn the HUE control and confirm that there are no abnormalities.

COLOR SYNC ADJUSTMENT

1. Input the PAL color bar.
2. Connect a 100kΩ resistor between IC301 pin (13) and the ground.
3. Connect a 10μF/16V chemical capacitor between IC301 pin (16) and the ground.
4. Connect a 2.2kΩ resistor between IC303 pin (2) and the 12V line.
5. Adjust RV303 so that color sync stops and the color becomes very light.
6. Disconnect the 2.2kΩ resistor.
7. Input the NTSC color bar.
8. Ground Q329 base momentarily and put into 3.58 MHz mode.
9. Adjust RV302 so that color sync stops and the color becomes very light.

COLOR ADJUSTMENT

1. Open B-1 connector (2) to release picture ABL.
2. Set PICTURE control at 80%, COLOR control at 50%, and observe the B-5 pin (2) blue output waveform.
3. Input the SECAM color bar and adjust RV305 for the waveform shown in the Figure.
4. Input the PAL color bar and adjust RV307 for the waveform shown in the Figure.



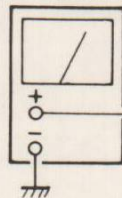
5. Connect the B-1 connector (2) and confirm that the picture level changes on the screen.

2-3. D BOARD ADJUSTMENT

B+ ADJUSTMENT

1. Supply $220V \pm 2Vac$ with variable auto transformer.
2. Adjust RV601 so that B+ is $115V \pm 0.5V$.
3. Supply $110V \pm 2Vac$.
4. Confirm that B+ is $115V \pm 0.5V$.

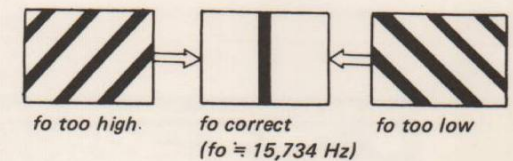
digital multimeter



D Board

H. FREQ. ADJUSTMENT

1. Connect a $10\mu F/50V$ chemical capacitor between TP12 and the ground.
2. Receive a broadcast signal.
3. Adjust RV501 for the image shown below.



4. Remove a $10\mu F/50V$.
5. Change tuner channel and confirm that picture does not change.

V. SIZE and V. CENT ADJUSTMENT

Adjust the best vertical size and position.

PINCUSHION ADJUSTMENT

Feed in a cross-hatch pattern and adjust as shown.

• PIN PHASE (RV503)



• PIN AMP (RV504)

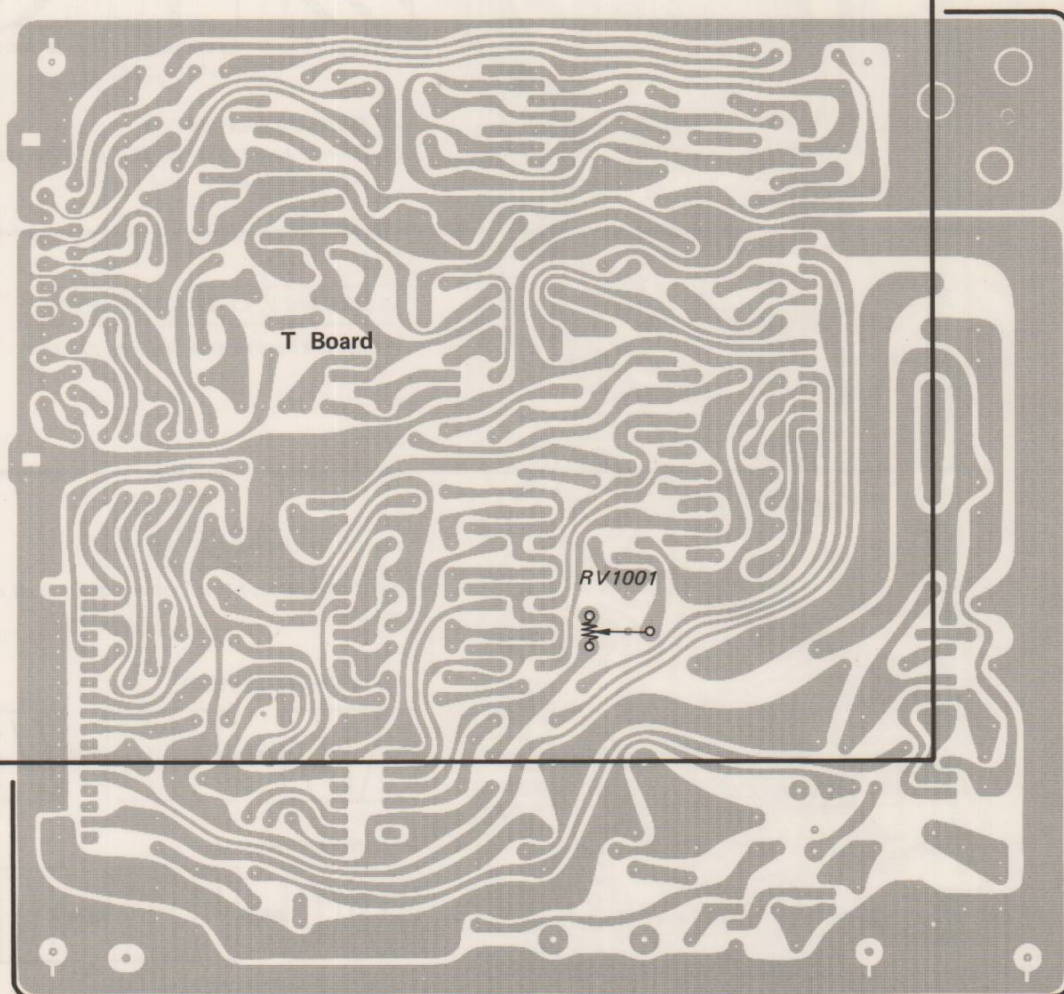
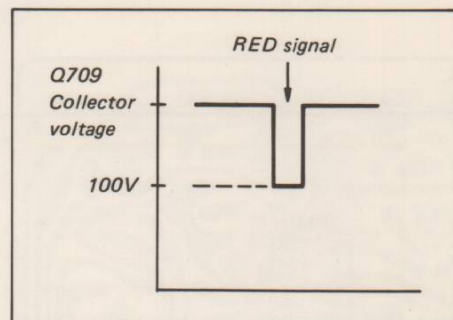
**H. SIZE and H. CENT ADJUSTMENT**

Adjust the best horizontal size and position.

2-4. T BOARD ADJUSTMENT

RGB Level Adjustment

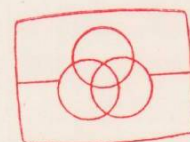
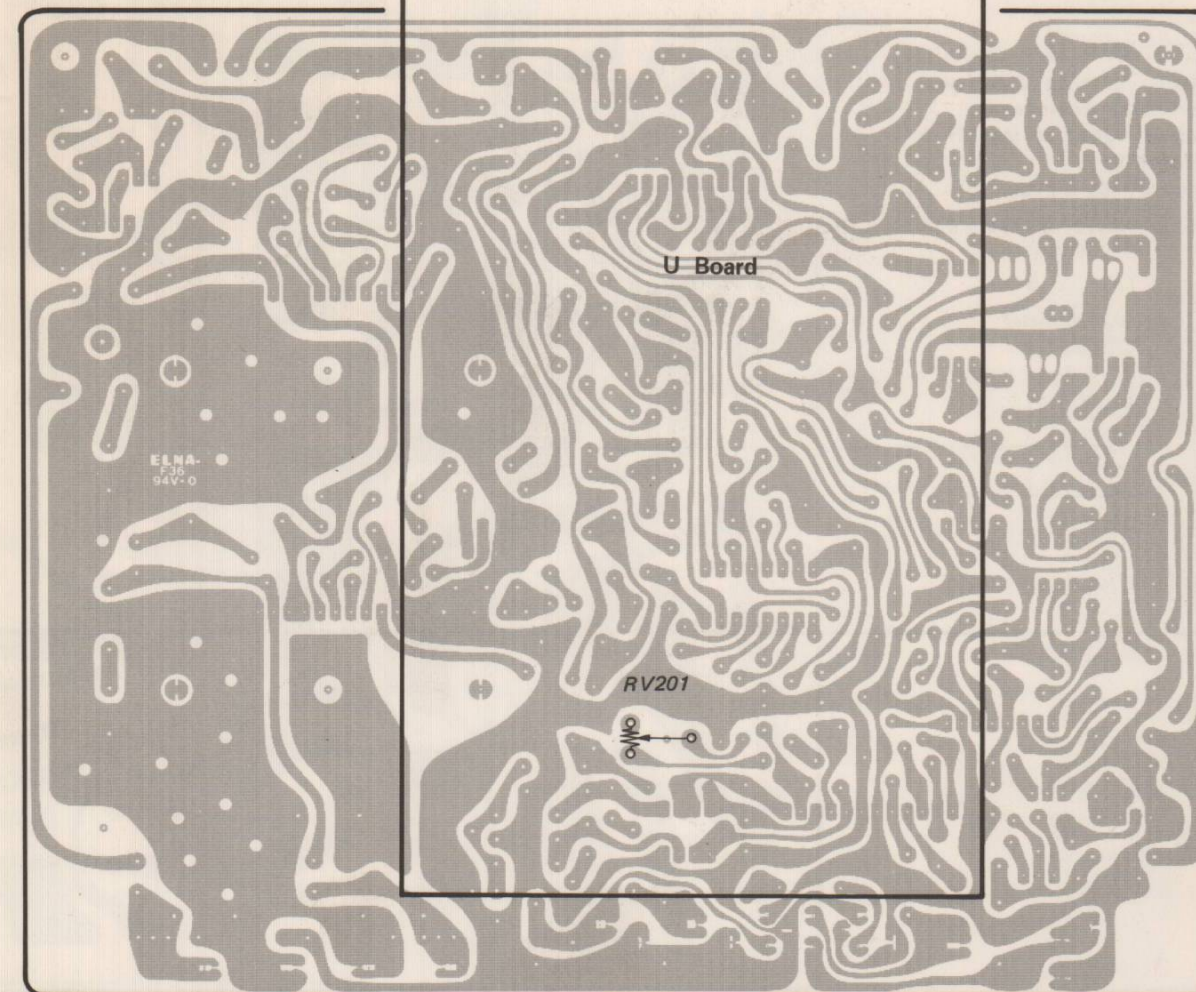
1. Supply 10Vdc to pin (8) and 1Vdc to pin (16) of connector T-6.
2. Input the 0.7 Vp-p RGB signal to pin (15), (11) and (7).
The area of the RGB signals must be small enough to avoid ABL effect.
3. Set Picture control to maximum.
4. Adjust RV1001 so that the peak value of Q709 collector on C board shows 100V.



2-5. U BOARD ADJUSTMENT

LEFT/RIGHT BALANCE ADJUSTMENT

Adjust RV201 for equal left and right.

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